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Electric Energy, Inc.

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**2024 40 C.F.R. § 257 ANNUAL
GROUNDWATER MONITORING AND
CORRECTIVE ACTION REPORT
EAST ASH POND
JOPPA POWER PLANT
JOPPA, ILLINOIS
CCR UNIT 401**

**2024 40 C.F.R. § 257 ANNUAL GROUNDWATER
MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT EAST ASH POND**

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Prepared by **Rachel A. Banoff, EIT**
Checked by **Lauren D. Cook**
Approved by **Brian G. Hennings**
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Ramboll
234 W. Florida Street
Fifth Floor
Milwaukee, WI 53204
USA

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



Rachel A. Banoff, EIT
Environmental Engineer



Brian G. Hennings, PG
Project Officer, Hydrogeology

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ACRONYMS AND ABBREVIATIONS

35 I.A.C.	Title 35 of the Illinois Administrative Code
40 C.F.R.	Title 40 of the Code of Federal Regulations
A6D	Quarter 3, 2023 Assessment Monitoring sampling event
A6DR	Quarter 4, 2023 Assessment Monitoring sampling event
A7	Quarter 1, 2024 Assessment Monitoring sampling event
A7R	Quarter 2, 2024 Assessment Monitoring sampling event
A7D	Quarter 3, 2024 Assessment Monitoring sampling event
A7DR	Quarter 4, 2024 Assessment Monitoring sampling event
ASD	Alternative Source Demonstration
CCR	coal combustion residuals
CMA	Corrective Measures Assessment
EAP	East Ash Pond
GWPS	groundwater protection standard
JPP	Joppa Power Plant
NA	not applicable
Ramboll	Ramboll Americas Engineering Solutions, Inc.
SAP	Sampling and Analysis Plan
SSI	statistically significant increase
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 East Ash Pond (EAP) located at the Joppa Power Plant (JPP) near Joppa, Illinois.

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

Staff gage SG02 was decommissioned and replaced by a new staff gage (SG03) which was installed in January 2024.

No Statistically Significant Levels (SSLs) of 40 C.F.R. § 257 Appendix IV parameters over groundwater protection standards (GWPSs) were determined in 2024; therefore, a Corrective Measures Assessment (CMA) is not required. Statistically significant increases (SSIs) of Appendix III parameters above background values were determined as discussed in **Section 3**; therefore, the EAP remains in the Assessment Monitoring Program.

1. INTRODUCTION

This report has been prepared by Ramboll Americas Engineering Solutions, Inc. (Ramboll) on behalf of Electric Energy, Inc., to provide the information required by 40 C.F.R. § 257.90(e) for the EAP located at the JPP near Joppa, Illinois.

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 SSI relative to background levels) (**Section 2**).
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 SSI 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 SSL above the groundwater protection standard 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 EAP for calendar year 2024.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

No changes have occurred to the monitoring program status in calendar year 2024 and the EAP remains in the Assessment Monitoring Program in accordance with 40 C.F.R. § 257.95.

3. KEY ACTIONS COMPLETED IN 2024

A summary of the samples collected from background and compliance monitoring wells in 2024 under the Assessment Monitoring Program is included in **Table A** on the following page. The groundwater monitoring system, including the CCR unit and all background and compliance monitoring wells, is presented in **Figure 1**. Staff gage SG02 was decommissioned and replaced by a new staff gage (SG03) which was installed in January 2024.

One groundwater sample was collected from each background and compliance well during each monitoring event. The EAP is also regulated under Title 35 of the Illinois Administrative Code (35 I.A.C.) § 845, which requires quarterly monitoring. The groundwater monitoring systems for both programs (35 I.A.C. § 845 and 40 C.F.R. § 257) are identical, so all available data from the four quarterly monitoring events in 2024 are included in this report. All samples were collected and analyzed in accordance with the Multi-Site Sampling and Analysis Plan (SAP) (Ramboll, 2023). Data collected in accordance with 35 I.A.C. § 845 was included for statistical calculations performed in accordance with 40 C.F.R. § 257.93; however, SSLs are reported semiannually per 40 C.F.R. § 257.95(d)(1).

Potentiometric surfaces for the quarterly sampling events are included in **Figures 2 through 5**. All monitoring data and analytical results obtained under 40 C.F.R. § 257.90 through 257.98 and 35 I.A.C. § 845 in 2024 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** and a flow chart showing the statistical methodology for determination of background values is included as **Appendix B**. GWPSs are provided in **Table 5**. A summary of the determination of SSLs is included in **Table 6**. A flow chart showing the statistical methodology for determination of SSLs is included as **Appendix C**.

Table A. 2024 Assessment Monitoring Program Summary

Event ID	Sampling Dates ^{1, 2, 3}	Analytical Data Receipt Date ⁴	SSL(s) Determination Date	SSL(s)	ASD Completion Date
A6D	September 25 - 27, 2023	November 16, 2023	February 14, 2024 ⁵	None	NA
A6DR	October 23 - 25, 2023	December 1, 2023	NA	NA	NA
A7	January 29 – February 1, 2024	March 4, 2024	June 2, 2024	None	NA
A7R	April 22 - 23, 2024	May 29, 2024	NA	NA	NA
A7D	July 23 - 24, 2024	August 26, 2024	November 24, 2024	None	NA
A7DR	October 21 - 22, 2024	November 26, 2024	NA	NA	NA

Notes:

ASD: Alternative Source Demonstration

NA: not applicable

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: G01D and G02D

³ The following compliance wells were sampled for each event: G03, G05, G06, G07, G08, G09, G10, G11, G51D, G52D, G53D, and G54D

⁴ Data collected in accordance with 35 I.A.C. § 845 was included for statistical calculations performed in accordance with 40 C.F.R. § 257.95(d)(1); however, SSLs are reported semiannually per 40 C.F.R. § 257.

⁵ Statistical determinations were completed in 2024. Analytical data from 2023 sampling events used in statistical determinations are included in the 2024 Annual Groundwater Monitoring and Corrective Action Report for completeness.

4. PROBLEMS ENCOUNTERED AND ACTIONS TO RESOLVE THE PROBLEMS

No problems were encountered with the groundwater monitoring program during 2024. Groundwater samples were collected and analyzed in accordance with the Multi-Site SAP and all data were accepted.

5. KEY ACTIVITIES PLANNED FOR 2025

The following key activities are planned for 2025:

- Continuation of the Assessment Monitoring Program with semiannual sampling for reporting purposes scheduled for the first and third quarters of 2025 (and sampling for 35 I.A.C. § 845 scheduled for the second and fourth quarters).
- Complete evaluation of analytical data from the compliance wells to determine whether an SSL of Appendix IV parameters above GWPSs has occurred.
- If an SSL is identified, potential alternative sources (*i.e.*, a source other than the CCR unit caused the SSL or that the SSL resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality) will be evaluated.
 - If an alternative source is identified to be the cause of the SSL, a written demonstration will be completed within 90 days of SSL determination and included in the 2024 Annual Groundwater Monitoring and Corrective Action Report.
 - If an alternative source(s) is not identified to be the cause of the SSL, the applicable requirements of 40 C.F.R. §§ 257.94 through 257.98 (*e.g.*, assessment of corrective measures) as may apply in 2025 will be met, including associated recordkeeping/notifications required by 40 C.F.R. §§ 257.105 through 257.108.

6. REFERENCES

Code of Federal Regulations, Title 40, Chapter I, Subchapter I, Part 257, Subpart D, Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, effective April 17, 2015. Accessed from URL <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-I/part-257/subpart-D#page-top>

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), 2023. Multi-Site Sampling and Analysis Plan, Revision 1. October 10, 2023.

TABLES

TABLE 1
GROUNDWATER ELEVATION DATA
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G01D	Background	UA	01/29/2024	43.97	320.39
G01D	Background	UA	02/22/2024	42.68	321.67
G01D	Background	UA	03/22/2024	42.68	321.67
G01D	Background	UA	04/22/2024	41.85	322.51
G01D	Background	UA	05/22/2024	39.24	325.11
G01D	Background	UA	06/22/2024	DM ⁷	
G01D	Background	UA	07/22/2024	42.83	321.53
G01D	Background	UA	08/23/2024	43.80	320.56
G01D	Background	UA	09/21/2024	DM ⁷	
G01D	Background	UA	10/21/2024	44.65	319.64
G01D	Background	UA	11/14/2024	DM ⁷	
G01D	Background	UA	12/09/2024	44.60	319.69
G02D	Background	UA	01/29/2024	44.42	319.40
G02D	Background	UA	02/22/2024	DM ⁷	
G02D	Background	UA	03/22/2024	DM ⁷	
G02D	Background	UA	04/22/2024	42.33	321.49
G02D	Background	UA	05/22/2024	40.49	323.33
G02D	Background	UA	06/22/2024	41.64	322.18
G02D	Background	UA	07/22/2024	43.14	320.68
G02D	Background	UA	08/23/2024	DM ⁷	
G02D	Background	UA	09/21/2024	DM ⁷	
G02D	Background	UA	10/21/2024	44.94	318.72
G02D	Background	UA	11/14/2024	DM ⁷	
G02D	Background	UA	12/09/2024	44.88	318.78
G03	Compliance	UA	01/29/2024	39.51	318.53
G03	Compliance	UA	02/22/2024	DM ⁷	
G03	Compliance	UA	03/22/2024	DM ⁷	
G03	Compliance	UA	04/22/2024	37.38	320.66
G03	Compliance	UA	05/22/2024	DM ⁷	
G03	Compliance	UA	06/22/2024	DM ⁷	
G03	Compliance	UA	07/22/2024	38.03	320.01
G03	Compliance	UA	08/23/2024	38.05	319.99
G03	Compliance	UA	09/21/2024	DM ⁷	
G03	Compliance	UA	10/21/2024	39.88	318.11
G03	Compliance	UA	11/14/2024	DM ⁷	
G03	Compliance	UA	12/09/2024	39.88	318.11
G05	Compliance	UA	01/29/2024	44.27	317.11
G05	Compliance	UA	02/22/2024	42.46	318.91
G05	Compliance	UA	03/22/2024	42.58	318.79
G05	Compliance	UA	04/22/2024	41.76	319.62
G05	Compliance	UA	05/22/2024	40.05	321.33
G05	Compliance	UA	06/22/2024	41.53	319.85
G05	Compliance	UA	07/22/2024	42.98	318.40
G05	Compliance	UA	08/23/2024	44.03	317.52
G05	Compliance	UA	09/21/2024	44.50	317.05
G05	Compliance	UA	10/21/2024	44.79	316.77

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JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G05	Compliance	UA	11/14/2024	DM7	
G05	Compliance	UA	12/09/2024	41.81	319.75
G06	Compliance	UA	01/29/2024	41.70	313.71
G06	Compliance	UA	02/22/2024	38.77	316.63
G06	Compliance	UA	03/22/2024	39.06	316.34
G06	Compliance	UA	04/22/2024	37.75	317.66
G06	Compliance	UA	05/22/2024	36.13	319.28
G06	Compliance	UA	06/22/2024	38.36	317.05
G06	Compliance	UA	07/22/2024	40.13	315.28
G06	Compliance	UA	08/23/2024	40.87	314.50
G06	Compliance	UA	09/21/2024	41.34	314.03
G06	Compliance	UA	10/21/2024	41.84	313.54
G06	Compliance	UA	11/14/2024	DM7	
G06	Compliance	UA	12/09/2024	41.90	313.48
G07	Compliance	UA	01/29/2024	41.14	312.56
G07	Compliance	UA	02/22/2024	38.74	314.95
G07	Compliance	UA	03/22/2024	39.09	314.60
G07	Compliance	UA	04/22/2024	37.30	316.40
G07	Compliance	UA	05/22/2024	35.98	317.72
G07	Compliance	UA	06/22/2024	38.56	315.14
G07	Compliance	UA	07/22/2024	40.29	313.41
G07	Compliance	UA	08/23/2024	41.13	312.51
G07	Compliance	UA	09/21/2024	41.60	312.04
G07	Compliance	UA	10/21/2024	41.91	311.74
G07	Compliance	UA	11/14/2024	DM7	
G07	Compliance	UA	12/09/2024	42.02	311.63
G08	Compliance	UA	01/29/2024	31.45	312.26
G08	Compliance	UA	02/22/2024	29.50	314.20
G08	Compliance	UA	03/22/2024	29.81	313.89
G08	Compliance	UA	04/22/2024	27.18	316.53
G08	Compliance	UA	05/22/2024	26.65	317.06
G08	Compliance	UA	06/22/2024	29.99	313.72
G08	Compliance	UA	07/22/2024	31.46	312.25
G08	Compliance	UA	08/23/2024	32.31	311.37
G08	Compliance	UA	09/21/2024	32.75	310.93
G08	Compliance	UA	10/21/2024	33.04	310.66
G08	Compliance	UA	11/14/2024	32.97	310.71
G08	Compliance	UA	12/09/2024	33.06	310.64
G09	Compliance	UA	01/29/2024	39.35	312.52
G09	Compliance	UA	02/22/2024	37.94	313.93
G09	Compliance	UA	03/22/2024	38.19	313.68
G09	Compliance	UA	04/22/2024	34.69	317.18
G09	Compliance	UA	05/22/2024	35.04	316.83
G09	Compliance	UA	06/22/2024	39.07	312.80
G09	Compliance	UA	07/22/2024	40.60	311.27
G09	Compliance	UA	08/23/2024	41.02	310.77

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JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G09	Compliance	UA	09/21/2024	41.42	310.37
G09	Compliance	UA	10/21/2024	41.81	309.99
G09	Compliance	UA	11/14/2024	41.50	310.29
G09	Compliance	UA	12/09/2024	41.73	310.07
G10	Compliance	UA	01/29/2024	39.65	314.01
G10	Compliance	UA	02/22/2024	38.59	315.06
G10	Compliance	UA	03/22/2024	38.74	314.91
G10	Compliance	UA	04/22/2024	35.44	318.22
G10	Compliance	UA	05/22/2024	35.72	317.94
G10	Compliance	UA	06/22/2024	39.51	314.15
G10	Compliance	UA	07/22/2024	40.82	312.84
G10	Compliance	UA	08/23/2024	41.52	312.21
G10	Compliance	UA	09/21/2024	41.92	311.81
G10	Compliance	UA	10/21/2024	42.11	311.63
G10	Compliance	UA	11/14/2024	42.00	311.73
G10	Compliance	UA	12/09/2024	42.04	311.70
G11	Compliance	UA	01/29/2024	48.60	318.12
G11	Compliance	UA	02/22/2024	46.49	320.22
G11	Compliance	UA	03/22/2024	46.59	320.12
G11	Compliance	UA	04/22/2024	45.32	321.40
G11	Compliance	UA	05/22/2024	DM ¹	
G11	Compliance	UA	06/22/2024	DM ¹	
G11	Compliance	UA	07/22/2024	47.31	319.41
G11	Compliance	UA	08/23/2024	48.39	318.33
G11	Compliance	UA	09/21/2024	48.77	317.95
G11	Compliance	UA	10/21/2024	49.19	317.54
G11	Compliance	UA	11/14/2024	48.96	317.76
G11	Compliance	UA	12/09/2024	49.15	317.58
G51D	Compliance	UA	01/29/2024	44.93	319.09
G51D	Compliance	UA	02/22/2024	43.62	320.39
G51D	Compliance	UA	03/22/2024	43.60	320.41
G51D	Compliance	UA	04/22/2024	42.48	321.54
G51D	Compliance	UA	05/22/2024	40.91	323.11
G51D	Compliance	UA	06/22/2024	42.74	321.28
G51D	Compliance	UA	07/22/2024	44.07	319.95
G51D	Compliance	UA	08/23/2024	45.07	318.84
G51D	Compliance	UA	09/21/2024	45.62	318.29
G51D	Compliance	UA	10/21/2024	45.88	318.04
G51D	Compliance	UA	11/14/2024	45.84	318.08
G51D	Compliance	UA	12/09/2024	45.85	318.07
G52D	Compliance	UA	01/29/2024	30.84	317.74
G52D	Compliance	UA	02/22/2024	31.30	317.27
G52D	Compliance	UA	03/22/2024	28.44	320.13
G52D	Compliance	UA	04/22/2024	27.25	321.33
G52D	Compliance	UA	05/22/2024	28.18	320.39
G52D	Compliance	UA	06/22/2024	25.45	323.13

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EAST ASH POND
JOPPA, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G52D	Compliance	UA	07/22/2024	25.76	322.82
G52D	Compliance	UA	08/23/2024	28.57	319.93
G52D	Compliance	UA	09/21/2024	28.08	320.42
G52D	Compliance	UA	10/21/2024	28.54	319.97
G52D	Compliance	UA	11/14/2024	31.73	316.77
G52D	Compliance	UA	12/09/2024	29.83	318.68
G53D	Compliance	UA	01/29/2024	38.95	316.69
G53D	Compliance	UA	02/22/2024	37.13	318.50
G53D	Compliance	UA	03/22/2024	37.32	318.31
G53D	Compliance	UA	04/22/2024	36.31	319.33
G53D	Compliance	UA	05/22/2024	34.75	320.88
G53D	Compliance	UA	06/22/2024	36.50	319.13
G53D	Compliance	UA	07/22/2024	37.94	317.70
G53D	Compliance	UA	08/23/2024	38.86	316.68
G53D	Compliance	UA	09/21/2024	39.35	316.19
G53D	Compliance	UA	10/21/2024	39.59	315.96
G53D	Compliance	UA	11/14/2024	39.67	315.88
G53D	Compliance	UA	12/09/2024	39.59	315.96
G54D	Compliance	UA	01/29/2024	41.77	315.43
G54D	Compliance	UA	02/22/2024	40.99	316.20
G54D	Compliance	UA	03/22/2024	41.09	316.10
G54D	Compliance	UA	04/22/2024	37.95	319.25
G54D	Compliance	UA	05/22/2024	36.46	320.74
G54D	Compliance	UA	06/22/2024	40.17	317.03
G54D	Compliance	UA	07/22/2024	42.97	314.23
G54D	Compliance	UA	08/23/2024	43.59	313.53
G54D	Compliance	UA	09/21/2024	44.07	313.05
G54D	Compliance	UA	10/21/2024	44.24	312.89
G54D	Compliance	UA	11/14/2024	44.07	313.05
G54D	Compliance	UA	12/09/2024	44.15	312.98
XSG01	Water Level	CCR	01/29/2024	DM ²	
XSG01	Water Level	CCR	02/22/2024	DM ¹	
XSG01	Water Level	CCR	03/22/2024	DM ¹	
XSG01	Water Level	CCR	04/22/2024	DM ²	
XSG01	Water Level	CCR	05/22/2024	DM ¹	
XSG01	Water Level	CCR	06/22/2024	DM ¹	
XSG01	Water Level	CCR	07/22/2024	1.99	369.79
XSG01	Water Level	CCR	08/23/2024	DM ¹	
XSG01	Water Level	CCR	09/21/2024	DM ¹	
XSG01	Water Level	CCR	10/21/2024	22.56	349.22
SG03	Water Level	NA	01/29/2024	40.53	309.47
SG03	Water Level	NA	02/22/2024	49.65	300.34
SG03	Water Level	NA	03/22/2024	48.56	301.43
SG03	Water Level	NA	04/22/2024	38.25	311.75
SG03	Water Level	NA	05/22/2024	45.98	304.02
SG03	Water Level	NA	06/22/2024	52.70	297.30

TABLE 1
GROUNDWATER ELEVATION DATA
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
SG03	Water Level	NA	07/22/2024	52.58	297.42
SG03	Water Level	NA	08/23/2024	51.57	298.42
SG03	Water Level	NA	09/21/2024	51.47	298.52
SG03	Water Level	NA	10/21/2024	51.44	298.56
SG03	Water Level	NA	11/14/2024	52.38	297.61
SG03	Water Level	NA	12/09/2024	52.49	297.51

Notes:
BMP = below measuring point
Depth to Groundwater/Groundwater Elevation Code (if applicable):
DM¹ = Depth to water was not measured.
DM² = Depth to water was not measured because water was above or below the staff gage markings.
DM³ = Depth to water was not measured because the location was inaccessible.
DM⁴ = Depth to water was not measured because water level was below the top of the pump.
DM⁵ = Depth to water was not measured because water level was above the top of casing (artesian well).
DM⁶ = Depth to water was not measured because of damage to the well.
DM⁷ = Depth to water was not measured due to required pressure transducer maintenance.
DM⁸ = Lab provided groundwater elevation data and not depth to water.
NA = not available/not applicable
NAVD88 = North American Vertical Datum of 1988
Monitored Unit Abbreviations:
CCR = coal combustion residuals
UA = uppermost aquifer

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TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
G01D	UA	Background	09/25/2023	A6D	Boron, total	mg/L	0.03 UJ	--	--	--
G01D	UA	Background	10/23/2023	A6DR	Boron, total	mg/L	0.014 J	--	--	--
G01D	UA	Background	01/29/2024	A7	Boron, total	mg/L	0.03 UJ	--	--	--
G01D	UA	Background	04/22/2024	A7R	Boron, total	mg/L	0.0092 U	--	--	--
G01D	UA	Background	07/23/2024	A7D	Boron, total	mg/L	0.013 J	--	--	--
G01D	UA	Background	10/21/2024	A7DR	Boron, total	mg/L	0.025 UJ	--	--	--
G01D	UA	Background	09/25/2023	A6D	Calcium, total	mg/L	31.1	--	--	--
G01D	UA	Background	10/23/2023	A6DR	Calcium, total	mg/L	33.0	--	--	--
G01D	UA	Background	01/29/2024	A7	Calcium, total	mg/L	39.2	--	--	--
G01D	UA	Background	04/22/2024	A7R	Calcium, total	mg/L	40.4	--	--	--
G01D	UA	Background	07/23/2024	A7D	Calcium, total	mg/L	37.7	--	--	--
G01D	UA	Background	10/21/2024	A7DR	Calcium, total	mg/L	38.1	--	--	--
G01D	UA	Background	09/25/2023	A6D	Chloride, total	mg/L	11.0	--	--	--
G01D	UA	Background	10/23/2023	A6DR	Chloride, total	mg/L	13.0	--	--	--
G01D	UA	Background	01/29/2024	A7	Chloride, total	mg/L	16.0	--	--	--
G01D	UA	Background	04/22/2024	A7R	Chloride, total	mg/L	16.0	--	--	--
G01D	UA	Background	07/23/2024	A7D	Chloride, total	mg/L	15.0	--	--	--
G01D	UA	Background	10/21/2024	A7DR	Chloride, total	mg/L	12.8	--	--	--
G01D	UA	Background	09/25/2023	A6D	Fluoride, total	mg/L	0.210	--	--	--
G01D	UA	Background	10/23/2023	A6DR	Fluoride, total	mg/L	0.200 J+	--	--	--
G01D	UA	Background	01/29/2024	A7	Fluoride, total	mg/L	0.170	--	--	--
G01D	UA	Background	04/22/2024	A7R	Fluoride, total	mg/L	0.200	--	--	--
G01D	UA	Background	07/23/2024	A7D	Fluoride, total	mg/L	0.180 J+	--	--	--
G01D	UA	Background	10/21/2024	A7DR	Fluoride, total	mg/L	0.2 U	--	--	--
G01D	UA	Background	09/25/2023	A6D	pH (field)	SU	6.5	--	--	--
G01D	UA	Background	10/23/2023	A6DR	pH (field)	SU	6.4	--	--	--
G01D	UA	Background	01/29/2024	A7	pH (field)	SU	6.4	--	--	--
G01D	UA	Background	04/22/2024	A7R	pH (field)	SU	6.3	--	--	--
G01D	UA	Background	07/23/2024	A7D	pH (field)	SU	6.3	--	--	--
G01D	UA	Background	10/21/2024	A7DR	pH (field)	SU	6.3	--	--	--
G01D	UA	Background	09/25/2023	A6D	Sulfate, total	mg/L	28.0	--	--	--
G01D	UA	Background	10/23/2023	A6DR	Sulfate, total	mg/L	30.0	--	--	--
G01D	UA	Background	01/29/2024	A7	Sulfate, total	mg/L	34.0	--	--	--
G01D	UA	Background	04/22/2024	A7R	Sulfate, total	mg/L	42.0	--	--	--
G01D	UA	Background	07/23/2024	A7D	Sulfate, total	mg/L	43.0 J-	--	--	--
G01D	UA	Background	10/21/2024	A7DR	Sulfate, total	mg/L	39.0	--	--	--
G01D	UA	Background	09/25/2023	A6D	Total Dissolved Solids	mg/L	350	--	--	--
G01D	UA	Background	10/23/2023	A6DR	Total Dissolved Solids	mg/L	308	--	--	--
G01D	UA	Background	01/29/2024	A7	Total Dissolved Solids	mg/L	350	--	--	--
G01D	UA	Background	04/22/2024	A7R	Total Dissolved Solids	mg/L	310	--	--	--
G01D	UA	Background	07/23/2024	A7D	Total Dissolved Solids	mg/L	350	--	--	--
G01D	UA	Background	10/21/2024	A7DR	Total Dissolved Solids	mg/L	380 J+	--	--	--
G02D	UA	Background	09/25/2023	A6D	Boron, total	mg/L	0.0401	--	--	--
G02D	UA	Background	10/23/2023	A6DR	Boron, total	mg/L	0.0276	--	--	--
G02D	UA	Background	01/29/2024	A7	Boron, total	mg/L	0.0323 J+	--	--	--
G02D	UA	Background	04/22/2024	A7R	Boron, total	mg/L	0.0092 U	--	--	--

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
G02D	UA	Background	07/23/2024	A7D	Boron, total	mg/L	0.0292	--	--	--
G02D	UA	Background	10/21/2024	A7DR	Boron, total	mg/L	0.0382 J+	--	--	--
G02D	UA	Background	09/25/2023	A6D	Calcium, total	mg/L	33.7	--	--	--
G02D	UA	Background	10/23/2023	A6DR	Calcium, total	mg/L	34.0	--	--	--
G02D	UA	Background	01/29/2024	A7	Calcium, total	mg/L	37.0	--	--	--
G02D	UA	Background	04/22/2024	A7R	Calcium, total	mg/L	38.9	--	--	--
G02D	UA	Background	07/23/2024	A7D	Calcium, total	mg/L	35.4	--	--	--
G02D	UA	Background	10/21/2024	A7DR	Calcium, total	mg/L	36.4	--	--	--
G02D	UA	Background	09/25/2023	A6D	Chloride, total	mg/L	21.0	--	--	--
G02D	UA	Background	10/23/2023	A6DR	Chloride, total	mg/L	22.0	--	--	--
G02D	UA	Background	01/29/2024	A7	Chloride, total	mg/L	22.0	--	--	--
G02D	UA	Background	04/22/2024	A7R	Chloride, total	mg/L	19.0	--	--	--
G02D	UA	Background	07/23/2024	A7D	Chloride, total	mg/L	19.0	--	--	--
G02D	UA	Background	10/21/2024	A7DR	Chloride, total	mg/L	18.6	--	--	--
G02D	UA	Background	09/25/2023	A6D	Fluoride, total	mg/L	0.210	--	--	--
G02D	UA	Background	10/23/2023	A6DR	Fluoride, total	mg/L	0.190 J+	--	--	--
G02D	UA	Background	01/29/2024	A7	Fluoride, total	mg/L	0.190	--	--	--
G02D	UA	Background	04/22/2024	A7R	Fluoride, total	mg/L	0.220	--	--	--
G02D	UA	Background	07/23/2024	A7D	Fluoride, total	mg/L	0.200 J+	--	--	--
G02D	UA	Background	10/21/2024	A7DR	Fluoride, total	mg/L	0.2 U	--	--	--
G02D	UA	Background	09/25/2023	A6D	pH (field)	SU	6.4	--	--	--
G02D	UA	Background	10/23/2023	A6DR	pH (field)	SU	6.4	--	--	--
G02D	UA	Background	01/29/2024	A7	pH (field)	SU	6.4	--	--	--
G02D	UA	Background	04/22/2024	A7R	pH (field)	SU	6.2	--	--	--
G02D	UA	Background	07/23/2024	A7D	pH (field)	SU	6.4	--	--	--
G02D	UA	Background	10/21/2024	A7DR	pH (field)	SU	6.2	--	--	--
G02D	UA	Background	09/25/2023	A6D	Sulfate, total	mg/L	15.0	--	--	--
G02D	UA	Background	10/23/2023	A6DR	Sulfate, total	mg/L	15.0	--	--	--
G02D	UA	Background	01/29/2024	A7	Sulfate, total	mg/L	15.0	--	--	--
G02D	UA	Background	04/22/2024	A7R	Sulfate, total	mg/L	13.0	--	--	--
G02D	UA	Background	07/23/2024	A7D	Sulfate, total	mg/L	17.0	--	--	--
G02D	UA	Background	10/21/2024	A7DR	Sulfate, total	mg/L	13.0	--	--	--
G02D	UA	Background	09/25/2023	A6D	Total Dissolved Solids	mg/L	226	--	--	--
G02D	UA	Background	10/23/2023	A6DR	Total Dissolved Solids	mg/L	204	--	--	--
G02D	UA	Background	01/29/2024	A7	Total Dissolved Solids	mg/L	230	--	--	--
G02D	UA	Background	04/22/2024	A7R	Total Dissolved Solids	mg/L	218	--	--	--
G02D	UA	Background	07/23/2024	A7D	Total Dissolved Solids	mg/L	218	--	--	--
G02D	UA	Background	10/21/2024	A7DR	Total Dissolved Solids	mg/L	280 J+	--	--	--
G03	UA	Compliance	09/26/2023	A6D	Boron, total	mg/L	0.267	0.267	0.0552	Reported
G03	UA	Compliance	10/23/2023	A6DR	Boron, total	mg/L	0.269	0.269	0.0552	Confirmed
G03	UA	Compliance	01/30/2024	A7	Boron, total	mg/L	0.227	0.227	0.0552	Reported
G03	UA	Compliance	04/22/2024	A7R	Boron, total	mg/L	0.280	0.280	0.0552	Confirmed
G03	UA	Compliance	07/23/2024	A7D	Boron, total	mg/L	0.194	0.194	0.0552	Reported
G03	UA	Compliance	10/21/2024	A7DR	Boron, total	mg/L	0.263	0.263	0.0552	Confirmed
G03	UA	Compliance	09/26/2023	A6D	Calcium, total	mg/L	41.8	41.8	46.7	No Exceedance
G03	UA	Compliance	10/23/2023	A6DR	Calcium, total	mg/L	42.8	42.8	46.7	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
G03	UA	Compliance	01/30/2024	A7	Calcium, total	mg/L	44.6	44.6	46.7	No Exceedance
G03	UA	Compliance	04/22/2024	A7R	Calcium, total	mg/L	45.2	45.2	46.7	No Exceedance
G03	UA	Compliance	07/23/2024	A7D	Calcium, total	mg/L	41.7	41.7	46.7	No Exceedance
G03	UA	Compliance	10/21/2024	A7DR	Calcium, total	mg/L	47.8	47.8	46.7	Exceedance Not Confirmed
G03	UA	Compliance	09/26/2023	A6D	Chloride, total	mg/L	19.0	19.0	29.4	No Exceedance
G03	UA	Compliance	10/23/2023	A6DR	Chloride, total	mg/L	20.0	20.0	29.4	No Exceedance
G03	UA	Compliance	01/30/2024	A7	Chloride, total	mg/L	21.0	21.0	29.4	No Exceedance
G03	UA	Compliance	04/22/2024	A7R	Chloride, total	mg/L	20.0	20.0	29.4	No Exceedance
G03	UA	Compliance	07/23/2024	A7D	Chloride, total	mg/L	23.0	23.0	29.4	No Exceedance
G03	UA	Compliance	10/21/2024	A7DR	Chloride, total	mg/L	23.5	23.5	29.4	No Exceedance
G03	UA	Compliance	09/26/2023	A6D	Fluoride, total	mg/L	0.210	0.210	0.288	No Exceedance
G03	UA	Compliance	10/23/2023	A6DR	Fluoride, total	mg/L	0.200 J+	0.200	0.288	No Exceedance
G03	UA	Compliance	01/30/2024	A7	Fluoride, total	mg/L	0.190	0.190	0.288	No Exceedance
G03	UA	Compliance	04/22/2024	A7R	Fluoride, total	mg/L	0.210	0.210	0.288	No Exceedance
G03	UA	Compliance	07/23/2024	A7D	Fluoride, total	mg/L	0.220 J+	0.220	0.288	No Exceedance
G03	UA	Compliance	10/21/2024	A7DR	Fluoride, total	mg/L	0.2 U	0.25	0.288	No Exceedance
G03	UA	Compliance	09/26/2023	A6D	pH (field)	SU	6.4	6.4	6.2/6.9	No Exceedance
G03	UA	Compliance	10/23/2023	A6DR	pH (field)	SU	6.4	6.4	6.2/6.9	No Exceedance
G03	UA	Compliance	01/30/2024	A7	pH (field)	SU	6.3	6.3	6.2/6.9	No Exceedance
G03	UA	Compliance	04/22/2024	A7R	pH (field)	SU	6.2	6.2	6.2/6.9	No Exceedance
G03	UA	Compliance	07/23/2024	A7D	pH (field)	SU	6.3	6.3	6.2/6.9	No Exceedance
G03	UA	Compliance	10/21/2024	A7DR	pH (field)	SU	6.0	6.0	6.2/6.9	Exceedance Not Confirmed
G03	UA	Compliance	09/26/2023	A6D	Sulfate, total	mg/L	67.0	67.0	203	No Exceedance
G03	UA	Compliance	10/23/2023	A6DR	Sulfate, total	mg/L	61.0	61.0	203	No Exceedance
G03	UA	Compliance	01/30/2024	A7	Sulfate, total	mg/L	61.0	61.0	203	No Exceedance
G03	UA	Compliance	04/22/2024	A7R	Sulfate, total	mg/L	73.0	73.0	203	No Exceedance
G03	UA	Compliance	07/23/2024	A7D	Sulfate, total	mg/L	62.0	62.0	203	No Exceedance
G03	UA	Compliance	10/21/2024	A7DR	Sulfate, total	mg/L	74.9	74.9	203	No Exceedance
G03	UA	Compliance	09/26/2023	A6D	Total Dissolved Solids	mg/L	295	295	541	No Exceedance
G03	UA	Compliance	10/23/2023	A6DR	Total Dissolved Solids	mg/L	254	254	541	No Exceedance
G03	UA	Compliance	01/30/2024	A7	Total Dissolved Solids	mg/L	290	290	541	No Exceedance
G03	UA	Compliance	04/22/2024	A7R	Total Dissolved Solids	mg/L	245	245	541	No Exceedance
G03	UA	Compliance	07/23/2024	A7D	Total Dissolved Solids	mg/L	340	340	541	No Exceedance
G03	UA	Compliance	10/21/2024	A7DR	Total Dissolved Solids	mg/L	385	385	541	No Exceedance
G05	UA	Compliance	09/27/2023	A6D	Boron, total	mg/L	0.0436	0.0436	0.0552	No Exceedance
G05	UA	Compliance	10/24/2023	A6DR	Boron, total	mg/L	0.0485	0.0485	0.0552	No Exceedance
G05	UA	Compliance	01/31/2024	A7	Boron, total	mg/L	0.0453 J+	0.0453	0.0552	No Exceedance
G05	UA	Compliance	04/23/2024	A7R	Boron, total	mg/L	0.0503 J+	0.0503	0.0552	No Exceedance
G05	UA	Compliance	07/24/2024	A7D	Boron, total	mg/L	0.0382	0.0382	0.0552	No Exceedance
G05	UA	Compliance	10/22/2024	A7DR	Boron, total	mg/L	0.0525 J+	0.0525	0.0552	No Exceedance
G05	UA	Compliance	09/27/2023	A6D	Calcium, total	mg/L	52.2	52.2	46.7	Reported
G05	UA	Compliance	10/24/2023	A6DR	Calcium, total	mg/L	50.4	50.4	46.7	Confirmed
G05	UA	Compliance	01/31/2024	A7	Calcium, total	mg/L	53.9	53.9	46.7	Reported
G05	UA	Compliance	04/23/2024	A7R	Calcium, total	mg/L	53.8	53.8	46.7	Confirmed
G05	UA	Compliance	07/24/2024	A7D	Calcium, total	mg/L	56.1	56.1	46.7	Reported

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
G05	UA	Compliance	10/22/2024	A7DR	Calcium, total	mg/L	54.2	54.2	46.7	Confirmed
G05	UA	Compliance	09/27/2023	A6D	Chloride, total	mg/L	20.0	20.0	29.4	No Exceedance
G05	UA	Compliance	10/24/2023	A6DR	Chloride, total	mg/L	22.0	22.0	29.4	No Exceedance
G05	UA	Compliance	01/31/2024	A7	Chloride, total	mg/L	21.0	21.0	29.4	No Exceedance
G05	UA	Compliance	04/23/2024	A7R	Chloride, total	mg/L	18.0	18.0	29.4	No Exceedance
G05	UA	Compliance	07/24/2024	A7D	Chloride, total	mg/L	21.0	21.0	29.4	No Exceedance
G05	UA	Compliance	10/22/2024	A7DR	Chloride, total	mg/L	24.2	24.2	29.4	No Exceedance
G05	UA	Compliance	09/27/2023	A6D	Fluoride, total	mg/L	0.410	0.410	0.288	Reported
G05	UA	Compliance	10/24/2023	A6DR	Fluoride, total	mg/L	0.440	0.440	0.288	Confirmed
G05	UA	Compliance	01/31/2024	A7	Fluoride, total	mg/L	0.350	0.350	0.288	Reported
G05	UA	Compliance	04/23/2024	A7R	Fluoride, total	mg/L	0.380	0.380	0.288	Confirmed
G05	UA	Compliance	07/24/2024	A7D	Fluoride, total	mg/L	0.400 J+	0.400	0.288	Reported
G05	UA	Compliance	10/22/2024	A7DR	Fluoride, total	mg/L	0.28 J	0.25	0.288	No Exceedance
G05	UA	Compliance	09/27/2023	A6D	pH (field)	SU	6.4	6.4	6.2/6.9	No Exceedance
G05	UA	Compliance	10/24/2023	A6DR	pH (field)	SU	6.4	6.4	6.2/6.9	No Exceedance
G05	UA	Compliance	01/31/2024	A7	pH (field)	SU	6.4	6.4	6.2/6.9	No Exceedance
G05	UA	Compliance	04/23/2024	A7R	pH (field)	SU	6.4	6.4	6.2/6.9	No Exceedance
G05	UA	Compliance	07/24/2024	A7D	pH (field)	SU	6.4	6.4	6.2/6.9	No Exceedance
G05	UA	Compliance	10/22/2024	A7DR	pH (field)	SU	6.2	6.2	6.2/6.9	No Exceedance
G05	UA	Compliance	09/27/2023	A6D	Sulfate, total	mg/L	82.0	82.0	203	No Exceedance
G05	UA	Compliance	10/24/2023	A6DR	Sulfate, total	mg/L	92.0	92.0	203	No Exceedance
G05	UA	Compliance	01/31/2024	A7	Sulfate, total	mg/L	101	101	203	No Exceedance
G05	UA	Compliance	04/23/2024	A7R	Sulfate, total	mg/L	90.0	90.0	203	No Exceedance
G05	UA	Compliance	07/24/2024	A7D	Sulfate, total	mg/L	90.0	90.0	203	No Exceedance
G05	UA	Compliance	10/22/2024	A7DR	Sulfate, total	mg/L	89.8	89.8	203	No Exceedance
G05	UA	Compliance	09/27/2023	A6D	Total Dissolved Solids	mg/L	360	360	541	No Exceedance
G05	UA	Compliance	10/24/2023	A6DR	Total Dissolved Solids	mg/L	358	358	541	No Exceedance
G05	UA	Compliance	01/31/2024	A7	Total Dissolved Solids	mg/L	365	365	541	No Exceedance
G05	UA	Compliance	04/23/2024	A7R	Total Dissolved Solids	mg/L	336	336	541	No Exceedance
G05	UA	Compliance	07/24/2024	A7D	Total Dissolved Solids	mg/L	396	396	541	No Exceedance
G05	UA	Compliance	10/22/2024	A7DR	Total Dissolved Solids	mg/L	428 J+	428	541	No Exceedance
G06	UA	Compliance	09/27/2023	A6D	Boron, total	mg/L	3.29	3.29	0.0552	Reported
G06	UA	Compliance	10/24/2023	A6DR	Boron, total	mg/L	3.73	3.73	0.0552	Confirmed
G06	UA	Compliance	01/30/2024	A7	Boron, total	mg/L	2.47	2.47	0.0552	Reported
G06	UA	Compliance	04/23/2024	A7R	Boron, total	mg/L	3.17	3.17	0.0552	Confirmed
G06	UA	Compliance	07/24/2024	A7D	Boron, total	mg/L	3.25	3.25	0.0552	Reported
G06	UA	Compliance	10/22/2024	A7DR	Boron, total	mg/L	3.34	3.34	0.0552	Confirmed
G06	UA	Compliance	09/27/2023	A6D	Calcium, total	mg/L	84.9	84.9	46.7	Reported
G06	UA	Compliance	10/24/2023	A6DR	Calcium, total	mg/L	82.5	82.5	46.7	Confirmed
G06	UA	Compliance	01/30/2024	A7	Calcium, total	mg/L	89.8	89.8	46.7	Reported
G06	UA	Compliance	04/23/2024	A7R	Calcium, total	mg/L	86.0	86.0	46.7	Confirmed
G06	UA	Compliance	07/24/2024	A7D	Calcium, total	mg/L	82.8	82.8	46.7	Reported
G06	UA	Compliance	10/22/2024	A7DR	Calcium, total	mg/L	81.4	81.4	46.7	Confirmed
G06	UA	Compliance	09/27/2023	A6D	Chloride, total	mg/L	21.0	21.0	29.4	No Exceedance
G06	UA	Compliance	10/24/2023	A6DR	Chloride, total	mg/L	22.0	22.0	29.4	No Exceedance
G06	UA	Compliance	01/30/2024	A7	Chloride, total	mg/L	21.0	21.0	29.4	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
G06	UA	Compliance	04/23/2024	A7R	Chloride, total	mg/L	19.0	19.0	29.4	No Exceedance
G06	UA	Compliance	07/24/2024	A7D	Chloride, total	mg/L	21.0	21.0	29.4	No Exceedance
G06	UA	Compliance	10/22/2024	A7DR	Chloride, total	mg/L	17.3	17.3	29.4	No Exceedance
G06	UA	Compliance	09/27/2023	A6D	Fluoride, total	mg/L	0.270	0.270	0.288	No Exceedance
G06	UA	Compliance	10/24/2023	A6DR	Fluoride, total	mg/L	0.290 J+	0.290	0.288	Exceedance Not Confirmed
G06	UA	Compliance	01/30/2024	A7	Fluoride, total	mg/L	0.230	0.230	0.288	No Exceedance
G06	UA	Compliance	04/23/2024	A7R	Fluoride, total	mg/L	0.260	0.260	0.288	No Exceedance
G06	UA	Compliance	07/24/2024	A7D	Fluoride, total	mg/L	0.270 J+	0.270	0.288	No Exceedance
G06	UA	Compliance	10/22/2024	A7DR	Fluoride, total	mg/L	0.2 U	0.25	0.288	No Exceedance
G06	UA	Compliance	09/27/2023	A6D	pH (field)	SU	6.6	6.6	6.2/6.9	No Exceedance
G06	UA	Compliance	10/24/2023	A6DR	pH (field)	SU	6.6	6.6	6.2/6.9	No Exceedance
G06	UA	Compliance	01/30/2024	A7	pH (field)	SU	6.6	6.6	6.2/6.9	No Exceedance
G06	UA	Compliance	04/23/2024	A7R	pH (field)	SU	6.6	6.6	6.2/6.9	No Exceedance
G06	UA	Compliance	07/24/2024	A7D	pH (field)	SU	6.5	6.5	6.2/6.9	No Exceedance
G06	UA	Compliance	10/22/2024	A7DR	pH (field)	SU	6.4	6.4	6.2/6.9	No Exceedance
G06	UA	Compliance	09/27/2023	A6D	Sulfate, total	mg/L	187	187	203	No Exceedance
G06	UA	Compliance	10/24/2023	A6DR	Sulfate, total	mg/L	196	196	203	No Exceedance
G06	UA	Compliance	01/30/2024	A7	Sulfate, total	mg/L	191	191	203	No Exceedance
G06	UA	Compliance	04/23/2024	A7R	Sulfate, total	mg/L	185	185	203	No Exceedance
G06	UA	Compliance	07/24/2024	A7D	Sulfate, total	mg/L	199	199	203	No Exceedance
G06	UA	Compliance	10/22/2024	A7DR	Sulfate, total	mg/L	179	179	203	No Exceedance
G06	UA	Compliance	09/27/2023	A6D	Total Dissolved Solids	mg/L	486	486	541	No Exceedance
G06	UA	Compliance	10/24/2023	A6DR	Total Dissolved Solids	mg/L	474	474	541	No Exceedance
G06	UA	Compliance	01/30/2024	A7	Total Dissolved Solids	mg/L	380	380	541	No Exceedance
G06	UA	Compliance	04/23/2024	A7R	Total Dissolved Solids	mg/L	486	486	541	No Exceedance
G06	UA	Compliance	07/24/2024	A7D	Total Dissolved Solids	mg/L	566	566	541	Reported
G06	UA	Compliance	10/22/2024	A7DR	Total Dissolved Solids	mg/L	605 J+	605	541	Confirmed
G07	UA	Compliance	09/27/2023	A6D	Boron, total	mg/L	5.80	5.80	0.0552	Reported
G07	UA	Compliance	10/24/2023	A6DR	Boron, total	mg/L	5.05	5.05	0.0552	Confirmed
G07	UA	Compliance	01/30/2024	A7	Boron, total	mg/L	3.93	3.93	0.0552	Reported
G07	UA	Compliance	04/23/2024	A7R	Boron, total	mg/L	4.12	4.12	0.0552	Confirmed
G07	UA	Compliance	07/24/2024	A7D	Boron, total	mg/L	4.83	4.83	0.0552	Reported
G07	UA	Compliance	10/22/2024	A7DR	Boron, total	mg/L	4.72	4.72	0.0552	Confirmed
G07	UA	Compliance	09/27/2023	A6D	Calcium, total	mg/L	97.1	97.1	46.7	Reported
G07	UA	Compliance	10/24/2023	A6DR	Calcium, total	mg/L	95.7	95.7	46.7	Confirmed
G07	UA	Compliance	01/30/2024	A7	Calcium, total	mg/L	99.2	99.2	46.7	Reported
G07	UA	Compliance	04/23/2024	A7R	Calcium, total	mg/L	94.5	94.5	46.7	Confirmed
G07	UA	Compliance	07/24/2024	A7D	Calcium, total	mg/L	93.9	93.9	46.7	Reported
G07	UA	Compliance	10/22/2024	A7DR	Calcium, total	mg/L	100	100	46.7	Confirmed
G07	UA	Compliance	09/27/2023	A6D	Chloride, total	mg/L	21.0	21.0	29.4	No Exceedance
G07	UA	Compliance	10/24/2023	A6DR	Chloride, total	mg/L	21.0	21.0	29.4	No Exceedance
G07	UA	Compliance	01/30/2024	A7	Chloride, total	mg/L	22.0	22.0	29.4	No Exceedance
G07	UA	Compliance	04/23/2024	A7R	Chloride, total	mg/L	20.0	20.0	29.4	No Exceedance
G07	UA	Compliance	07/24/2024	A7D	Chloride, total	mg/L	21.0	21.0	29.4	No Exceedance
G07	UA	Compliance	10/22/2024	A7DR	Chloride, total	mg/L	16.9	16.9	29.4	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
G07	UA	Compliance	09/27/2023	A6D	Fluoride, total	mg/L	0.430	0.430	0.288	Reported
G07	UA	Compliance	10/24/2023	A6DR	Fluoride, total	mg/L	0.410	0.410	0.288	Confirmed
G07	UA	Compliance	01/30/2024	A7	Fluoride, total	mg/L	0.380	0.380	0.288	Reported
G07	UA	Compliance	04/23/2024	A7R	Fluoride, total	mg/L	0.420	0.420	0.288	Confirmed
G07	UA	Compliance	07/24/2024	A7D	Fluoride, total	mg/L	0.440 J+	0.440	0.288	Reported
G07	UA	Compliance	10/22/2024	A7DR	Fluoride, total	mg/L	0.33 J	0.25	0.288	No Exceedance
G07	UA	Compliance	09/27/2023	A6D	pH (field)	SU	6.4	6.4	6.2/6.9	No Exceedance
G07	UA	Compliance	10/24/2023	A6DR	pH (field)	SU	6.4	6.4	6.2/6.9	No Exceedance
G07	UA	Compliance	01/30/2024	A7	pH (field)	SU	6.3	6.3	6.2/6.9	No Exceedance
G07	UA	Compliance	04/23/2024	A7R	pH (field)	SU	6.4	6.4	6.2/6.9	No Exceedance
G07	UA	Compliance	07/24/2024	A7D	pH (field)	SU	6.2	6.2	6.2/6.9	No Exceedance
G07	UA	Compliance	10/22/2024	A7DR	pH (field)	SU	6.2	6.2	6.2/6.9	No Exceedance
G07	UA	Compliance	09/27/2023	A6D	Sulfate, total	mg/L	268	268	203	Reported
G07	UA	Compliance	10/24/2023	A6DR	Sulfate, total	mg/L	285	285	203	Confirmed
G07	UA	Compliance	01/30/2024	A7	Sulfate, total	mg/L	293	293	203	Reported
G07	UA	Compliance	04/23/2024	A7R	Sulfate, total	mg/L	262	262	203	Confirmed
G07	UA	Compliance	07/24/2024	A7D	Sulfate, total	mg/L	274	274	203	Reported
G07	UA	Compliance	10/22/2024	A7DR	Sulfate, total	mg/L	273	273	203	Confirmed
G07	UA	Compliance	09/27/2023	A6D	Total Dissolved Solids	mg/L	612	612	541	Reported
G07	UA	Compliance	10/24/2023	A6DR	Total Dissolved Solids	mg/L	618	618	541	Confirmed
G07	UA	Compliance	01/30/2024	A7	Total Dissolved Solids	mg/L	650	650	541	Reported
G07	UA	Compliance	04/23/2024	A7R	Total Dissolved Solids	mg/L	575	575	541	Confirmed
G07	UA	Compliance	07/24/2024	A7D	Total Dissolved Solids	mg/L	676	676	541	Reported
G07	UA	Compliance	10/22/2024	A7DR	Total Dissolved Solids	mg/L	745 J	745	541	Confirmed
G08	UA	Compliance	09/26/2023	A6D	Boron, total	mg/L	6.30	6.30	0.0552	Reported
G08	UA	Compliance	10/24/2023	A6DR	Boron, total	mg/L	5.28	5.28	0.0552	Confirmed
G08	UA	Compliance	01/30/2024	A7	Boron, total	mg/L	4.61	4.61	0.0552	Reported
G08	UA	Compliance	04/23/2024	A7R	Boron, total	mg/L	4.45	4.45	0.0552	Confirmed
G08	UA	Compliance	07/24/2024	A7D	Boron, total	mg/L	5.88	5.88	0.0552	Reported
G08	UA	Compliance	10/22/2024	A7DR	Boron, total	mg/L	5.75	5.75	0.0552	Confirmed
G08	UA	Compliance	09/26/2023	A6D	Calcium, total	mg/L	132	132	46.7	Reported
G08	UA	Compliance	10/24/2023	A6DR	Calcium, total	mg/L	140	140	46.7	Confirmed
G08	UA	Compliance	01/30/2024	A7	Calcium, total	mg/L	134	134	46.7	Reported
G08	UA	Compliance	04/23/2024	A7R	Calcium, total	mg/L	121	121	46.7	Confirmed
G08	UA	Compliance	07/24/2024	A7D	Calcium, total	mg/L	128	128	46.7	Reported
G08	UA	Compliance	10/22/2024	A7DR	Calcium, total	mg/L	131	131	46.7	Confirmed
G08	UA	Compliance	09/26/2023	A6D	Chloride, total	mg/L	14.0	14.0	29.4	No Exceedance
G08	UA	Compliance	10/24/2023	A6DR	Chloride, total	mg/L	17.0	17.0	29.4	No Exceedance
G08	UA	Compliance	01/30/2024	A7	Chloride, total	mg/L	14.0	14.0	29.4	No Exceedance
G08	UA	Compliance	04/23/2024	A7R	Chloride, total	mg/L	12.0	12.0	29.4	No Exceedance
G08	UA	Compliance	07/24/2024	A7D	Chloride, total	mg/L	13.0	13.0	29.4	No Exceedance
G08	UA	Compliance	10/22/2024	A7DR	Chloride, total	mg/L	12.3	12.3	29.4	No Exceedance
G08	UA	Compliance	09/26/2023	A6D	Fluoride, total	mg/L	0.310	0.310	0.288	Reported
G08	UA	Compliance	10/24/2023	A6DR	Fluoride, total	mg/L	0.290 J+	0.290	0.288	Confirmed
G08	UA	Compliance	01/30/2024	A7	Fluoride, total	mg/L	0.260	0.260	0.288	No Exceedance
G08	UA	Compliance	04/23/2024	A7R	Fluoride, total	mg/L	0.280	0.280	0.288	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
G08	UA	Compliance	07/24/2024	A7D	Fluoride, total	mg/L	0.300 J+	0.300	0.288	Reported
G08	UA	Compliance	10/22/2024	A7DR	Fluoride, total	mg/L	0.2 J	0.25	0.288	No Exceedance
G08	UA	Compliance	09/26/2023	A6D	pH (field)	SU	7.0	7.0	6.2/6.9	Reported
G08	UA	Compliance	10/24/2023	A6DR	pH (field)	SU	7.0	7.0	6.2/6.9	Confirmed
G08	UA	Compliance	01/30/2024	A7	pH (field)	SU	6.9	6.9	6.2/6.9	No Exceedance
G08	UA	Compliance	04/23/2024	A7R	pH (field)	SU	6.9	6.9	6.2/6.9	No Exceedance
G08	UA	Compliance	07/24/2024	A7D	pH (field)	SU	7.1	7.1	6.2/6.9	Reported
G08	UA	Compliance	10/22/2024	A7DR	pH (field)	SU	6.8	6.8	6.2/6.9	No Exceedance
G08	UA	Compliance	09/26/2023	A6D	Sulfate, total	mg/L	320	320	203	Reported
G08	UA	Compliance	10/24/2023	A6DR	Sulfate, total	mg/L	389	389	203	Confirmed
G08	UA	Compliance	01/30/2024	A7	Sulfate, total	mg/L	334	334	203	Reported
G08	UA	Compliance	04/23/2024	A7R	Sulfate, total	mg/L	266	266	203	Confirmed
G08	UA	Compliance	07/24/2024	A7D	Sulfate, total	mg/L	325	325	203	Reported
G08	UA	Compliance	10/22/2024	A7DR	Sulfate, total	mg/L	348	348	203	Confirmed
G08	UA	Compliance	09/26/2023	A6D	Total Dissolved Solids	mg/L	680	680	541	Reported
G08	UA	Compliance	10/24/2023	A6DR	Total Dissolved Solids	mg/L	660	660	541	Confirmed
G08	UA	Compliance	01/30/2024	A7	Total Dissolved Solids	mg/L	670	670	541	Reported
G08	UA	Compliance	04/23/2024	A7R	Total Dissolved Solids	mg/L	592	592	541	Confirmed
G08	UA	Compliance	07/24/2024	A7D	Total Dissolved Solids	mg/L	670	670	541	Reported
G08	UA	Compliance	10/22/2024	A7DR	Total Dissolved Solids	mg/L	690 J	690	541	Confirmed
G09	UA	Compliance	09/26/2023	A6D	Boron, total	mg/L	4.57	4.57	0.0552	Reported
G09	UA	Compliance	10/25/2023	A6DR	Boron, total	mg/L	3.50	3.50	0.0552	Confirmed
G09	UA	Compliance	02/01/2024	A7	Boron, total	mg/L	2.95	2.95	0.0552	Reported
G09	UA	Compliance	04/23/2024	A7R	Boron, total	mg/L	3.52	3.52	0.0552	Confirmed
G09	UA	Compliance	07/23/2024	A7D	Boron, total	mg/L	3.34	3.34	0.0552	Reported
G09	UA	Compliance	10/22/2024	A7DR	Boron, total	mg/L	3.82	3.82	0.0552	Confirmed
G09	UA	Compliance	09/26/2023	A6D	Calcium, total	mg/L	64.8	64.8	46.7	Reported
G09	UA	Compliance	10/25/2023	A6DR	Calcium, total	mg/L	62.3	62.3	46.7	Confirmed
G09	UA	Compliance	02/01/2024	A7	Calcium, total	mg/L	60.8	60.8	46.7	Reported
G09	UA	Compliance	04/23/2024	A7R	Calcium, total	mg/L	64.6	64.6	46.7	Confirmed
G09	UA	Compliance	07/23/2024	A7D	Calcium, total	mg/L	58.4	58.4	46.7	Reported
G09	UA	Compliance	10/22/2024	A7DR	Calcium, total	mg/L	61.2	61.2	46.7	Confirmed
G09	UA	Compliance	09/26/2023	A6D	Chloride, total	mg/L	17.0	17.0	29.4	No Exceedance
G09	UA	Compliance	10/25/2023	A6DR	Chloride, total	mg/L	17.0	17.0	29.4	No Exceedance
G09	UA	Compliance	02/01/2024	A7	Chloride, total	mg/L	17.0	17.0	29.4	No Exceedance
G09	UA	Compliance	04/23/2024	A7R	Chloride, total	mg/L	15.0	15.0	29.4	No Exceedance
G09	UA	Compliance	07/23/2024	A7D	Chloride, total	mg/L	16.0	16.0	29.4	No Exceedance
G09	UA	Compliance	10/22/2024	A7DR	Chloride, total	mg/L	13.2	13.2	29.4	No Exceedance
G09	UA	Compliance	09/26/2023	A6D	Fluoride, total	mg/L	0.310	0.310	0.288	Reported
G09	UA	Compliance	10/25/2023	A6DR	Fluoride, total	mg/L	0.310 J+	0.310	0.288	Confirmed
G09	UA	Compliance	02/01/2024	A7	Fluoride, total	mg/L	0.250	0.250	0.288	No Exceedance
G09	UA	Compliance	04/23/2024	A7R	Fluoride, total	mg/L	0.270	0.270	0.288	No Exceedance
G09	UA	Compliance	07/23/2024	A7D	Fluoride, total	mg/L	0.320 J+	0.320	0.288	Reported
G09	UA	Compliance	10/22/2024	A7DR	Fluoride, total	mg/L	0.2 U	0.25	0.288	No Exceedance
G09	UA	Compliance	09/26/2023	A6D	pH (field)	SU	6.2	6.2	6.2/6.9	No Exceedance
G09	UA	Compliance	10/25/2023	A6DR	pH (field)	SU	6.2	6.2	6.2/6.9	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
G09	UA	Compliance	02/01/2024	A7	pH (field)	SU	6.0	6.0	6.2/6.9	Reported
G09	UA	Compliance	04/23/2024	A7R	pH (field)	SU	6.1	6.1	6.2/6.9	Confirmed
G09	UA	Compliance	07/23/2024	A7D	pH (field)	SU	6.4	6.4	6.2/6.9	No Exceedance
G09	UA	Compliance	10/22/2024	A7DR	pH (field)	SU	5.9	5.9	6.2/6.9	Exceedance Not Confirmed
G09	UA	Compliance	09/26/2023	A6D	Sulfate, total	mg/L	229	229	203	Reported
G09	UA	Compliance	10/25/2023	A6DR	Sulfate, total	mg/L	245	245	203	Confirmed
G09	UA	Compliance	02/01/2024	A7	Sulfate, total	mg/L	234	234	203	Reported
G09	UA	Compliance	04/23/2024	A7R	Sulfate, total	mg/L	234	234	203	Confirmed
G09	UA	Compliance	07/23/2024	A7D	Sulfate, total	mg/L	253	253	203	Reported
G09	UA	Compliance	10/22/2024	A7DR	Sulfate, total	mg/L	226	226	203	Confirmed
G09	UA	Compliance	09/26/2023	A6D	Total Dissolved Solids	mg/L	500	500	541	No Exceedance
G09	UA	Compliance	10/25/2023	A6DR	Total Dissolved Solids	mg/L	472	472	541	No Exceedance
G09	UA	Compliance	02/01/2024	A7	Total Dissolved Solids	mg/L	580	580	541	Exceedance Not Confirmed
G09	UA	Compliance	04/23/2024	A7R	Total Dissolved Solids	mg/L	530	530	541	No Exceedance
G09	UA	Compliance	07/23/2024	A7D	Total Dissolved Solids	mg/L	506	506	541	No Exceedance
G09	UA	Compliance	10/22/2024	A7DR	Total Dissolved Solids	mg/L	485 J	485	541	No Exceedance
G10	UA	Compliance	09/26/2023	A6D	Boron, total	mg/L	3.41	3.41	0.0552	Reported
G10	UA	Compliance	10/24/2023	A6DR	Boron, total	mg/L	2.35	2.35	0.0552	Confirmed
G10	UA	Compliance	01/30/2024	A7	Boron, total	mg/L	1.16	1.16	0.0552	Reported
G10	UA	Compliance	04/22/2024	A7R	Boron, total	mg/L	2.31	2.31	0.0552	Confirmed
G10	UA	Compliance	07/24/2024	A7D	Boron, total	mg/L	2.65	2.65	0.0552	Reported
G10	UA	Compliance	10/21/2024	A7DR	Boron, total	mg/L	2.38	2.38	0.0552	Confirmed
G10	UA	Compliance	09/26/2023	A6D	Calcium, total	mg/L	120	120	46.7	Reported
G10	UA	Compliance	10/24/2023	A6DR	Calcium, total	mg/L	117	117	46.7	Confirmed
G10	UA	Compliance	01/30/2024	A7	Calcium, total	mg/L	102	102	46.7	Reported
G10	UA	Compliance	04/22/2024	A7R	Calcium, total	mg/L	124	124	46.7	Confirmed
G10	UA	Compliance	07/24/2024	A7D	Calcium, total	mg/L	118	118	46.7	Reported
G10	UA	Compliance	10/21/2024	A7DR	Calcium, total	mg/L	127	127	46.7	Confirmed
G10	UA	Compliance	09/26/2023	A6D	Chloride, total	mg/L	24.0	24.0	29.4	No Exceedance
G10	UA	Compliance	10/24/2023	A6DR	Chloride, total	mg/L	26.0	26.0	29.4	No Exceedance
G10	UA	Compliance	01/30/2024	A7	Chloride, total	mg/L	21.0	21.0	29.4	No Exceedance
G10	UA	Compliance	04/22/2024	A7R	Chloride, total	mg/L	19.0	19.0	29.4	No Exceedance
G10	UA	Compliance	07/24/2024	A7D	Chloride, total	mg/L	19.0	19.0	29.4	No Exceedance
G10	UA	Compliance	10/21/2024	A7DR	Chloride, total	mg/L	17.2	17.2	29.4	No Exceedance
G10	UA	Compliance	09/26/2023	A6D	Fluoride, total	mg/L	0.370	0.370	0.288	Reported
G10	UA	Compliance	10/24/2023	A6DR	Fluoride, total	mg/L	0.350 J+	0.350	0.288	Confirmed
G10	UA	Compliance	01/30/2024	A7	Fluoride, total	mg/L	0.870	0.870	0.288	Reported
G10	UA	Compliance	04/22/2024	A7R	Fluoride, total	mg/L	0.490	0.490	0.288	Confirmed
G10	UA	Compliance	07/24/2024	A7D	Fluoride, total	mg/L	0.680	0.680	0.288	Reported
G10	UA	Compliance	10/21/2024	A7DR	Fluoride, total	mg/L	0.44 J	0.25	0.288	No Exceedance
G10	UA	Compliance	09/26/2023	A6D	pH (field)	SU	6.7	6.7	6.2/6.9	No Exceedance
G10	UA	Compliance	10/24/2023	A6DR	pH (field)	SU	6.6	6.6	6.2/6.9	No Exceedance
G10	UA	Compliance	01/30/2024	A7	pH (field)	SU	6.4	6.4	6.2/6.9	No Exceedance
G10	UA	Compliance	04/22/2024	A7R	pH (field)	SU	6.6	6.6	6.2/6.9	No Exceedance
G10	UA	Compliance	07/24/2024	A7D	pH (field)	SU	6.6	6.6	6.2/6.9	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
G10	UA	Compliance	10/21/2024	A7DR	pH (field)	SU	6.2	6.2	6.2/6.9	No Exceedance
G10	UA	Compliance	09/26/2023	A6D	Sulfate, total	mg/L	356	356	203	Reported
G10	UA	Compliance	10/24/2023	A6DR	Sulfate, total	mg/L	375	375	203	Confirmed
G10	UA	Compliance	01/30/2024	A7	Sulfate, total	mg/L	272	272	203	Reported
G10	UA	Compliance	04/22/2024	A7R	Sulfate, total	mg/L	339	339	203	Confirmed
G10	UA	Compliance	07/24/2024	A7D	Sulfate, total	mg/L	335	335	203	Reported
G10	UA	Compliance	10/21/2024	A7DR	Sulfate, total	mg/L	327	327	203	Confirmed
G10	UA	Compliance	09/26/2023	A6D	Total Dissolved Solids	mg/L	705	705	541	Reported
G10	UA	Compliance	10/24/2023	A6DR	Total Dissolved Solids	mg/L	800	800	541	Confirmed
G10	UA	Compliance	01/30/2024	A7	Total Dissolved Solids	mg/L	780	780	541	Reported
G10	UA	Compliance	04/22/2024	A7R	Total Dissolved Solids	mg/L	800	800	541	Confirmed
G10	UA	Compliance	07/24/2024	A7D	Total Dissolved Solids	mg/L	794	794	541	Reported
G10	UA	Compliance	10/21/2024	A7DR	Total Dissolved Solids	mg/L	1,040	1,040	541	Confirmed
G11	UA	Compliance	09/26/2023	A6D	Boron, total	mg/L	0.308	0.308	0.0552	Reported
G11	UA	Compliance	10/24/2023	A6DR	Boron, total	mg/L	0.282	0.282	0.0552	Confirmed
G11	UA	Compliance	01/30/2024	A7	Boron, total	mg/L	0.243	0.243	0.0552	Reported
G11	UA	Compliance	04/22/2024	A7R	Boron, total	mg/L	0.309	0.309	0.0552	Confirmed
G11	UA	Compliance	07/23/2024	A7D	Boron, total	mg/L	0.372	0.372	0.0552	Reported
G11	UA	Compliance	10/21/2024	A7DR	Boron, total	mg/L	0.385	0.385	0.0552	Confirmed
G11	UA	Compliance	09/26/2023	A6D	Calcium, total	mg/L	59.9	59.9	46.7	Reported
G11	UA	Compliance	10/24/2023	A6DR	Calcium, total	mg/L	54.4	54.4	46.7	Confirmed
G11	UA	Compliance	01/30/2024	A7	Calcium, total	mg/L	61.9	61.9	46.7	Reported
G11	UA	Compliance	04/22/2024	A7R	Calcium, total	mg/L	59.1	59.1	46.7	Confirmed
G11	UA	Compliance	07/23/2024	A7D	Calcium, total	mg/L	73.2	73.2	46.7	Reported
G11	UA	Compliance	10/21/2024	A7DR	Calcium, total	mg/L	63.3	63.3	46.7	Confirmed
G11	UA	Compliance	09/26/2023	A6D	Chloride, total	mg/L	29.0	29.0	29.4	No Exceedance
G11	UA	Compliance	10/24/2023	A6DR	Chloride, total	mg/L	30.0	30.0	29.4	Exceedance Not Confirmed
G11	UA	Compliance	01/30/2024	A7	Chloride, total	mg/L	25.0	25.0	29.4	No Exceedance
G11	UA	Compliance	04/22/2024	A7R	Chloride, total	mg/L	20.0	20.0	29.4	No Exceedance
G11	UA	Compliance	07/23/2024	A7D	Chloride, total	mg/L	25.0	25.0	29.4	No Exceedance
G11	UA	Compliance	10/21/2024	A7DR	Chloride, total	mg/L	23.2	23.2	29.4	No Exceedance
G11	UA	Compliance	09/26/2023	A6D	Fluoride, total	mg/L	0.160	0.160	0.288	No Exceedance
G11	UA	Compliance	10/24/2023	A6DR	Fluoride, total	mg/L	0.140 J+	0.140	0.288	No Exceedance
G11	UA	Compliance	01/30/2024	A7	Fluoride, total	mg/L	0.180	0.180	0.288	No Exceedance
G11	UA	Compliance	04/22/2024	A7R	Fluoride, total	mg/L	0.200	0.200	0.288	No Exceedance
G11	UA	Compliance	07/23/2024	A7D	Fluoride, total	mg/L	0.240 J+	0.240	0.288	No Exceedance
G11	UA	Compliance	10/21/2024	A7DR	Fluoride, total	mg/L	0.2 U	0.25	0.288	No Exceedance
G11	UA	Compliance	09/26/2023	A6D	pH (field)	SU	6.0	6.0	6.2/6.9	Reported
G11	UA	Compliance	10/24/2023	A6DR	pH (field)	SU	5.9	5.9	6.2/6.9	Confirmed
G11	UA	Compliance	01/30/2024	A7	pH (field)	SU	6.0	6.0	6.2/6.9	Exceedance Not Confirmed
G11	UA	Compliance	04/22/2024	A7R	pH (field)	SU	6.2	6.2	6.2/6.9	No Exceedance
G11	UA	Compliance	07/23/2024	A7D	pH (field)	SU	6.7	6.7	6.2/6.9	No Exceedance
G11	UA	Compliance	10/21/2024	A7DR	pH (field)	SU	5.7	5.7	6.2/6.9	Exceedance Not Confirmed
G11	UA	Compliance	09/26/2023	A6D	Sulfate, total	mg/L	192	192	203	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
G11	UA	Compliance	10/24/2023	A6DR	Sulfate, total	mg/L	180	180	203	No Exceedance
G11	UA	Compliance	01/30/2024	A7	Sulfate, total	mg/L	176	176	203	No Exceedance
G11	UA	Compliance	04/22/2024	A7R	Sulfate, total	mg/L	158	158	203	No Exceedance
G11	UA	Compliance	07/23/2024	A7D	Sulfate, total	mg/L	245	245	203	Reported
G11	UA	Compliance	10/21/2024	A7DR	Sulfate, total	mg/L	205	205	203	Confirmed
G11	UA	Compliance	09/26/2023	A6D	Total Dissolved Solids	mg/L	428	428	541	No Exceedance
G11	UA	Compliance	10/24/2023	A6DR	Total Dissolved Solids	mg/L	402	402	541	No Exceedance
G11	UA	Compliance	01/30/2024	A7	Total Dissolved Solids	mg/L	400	400	541	No Exceedance
G11	UA	Compliance	04/22/2024	A7R	Total Dissolved Solids	mg/L	358	358	541	No Exceedance
G11	UA	Compliance	07/23/2024	A7D	Total Dissolved Solids	mg/L	638	638	541	Reported
G11	UA	Compliance	10/21/2024	A7DR	Total Dissolved Solids	mg/L	530	530	541	No Exceedance
G51D	UA	Compliance	09/25/2023	A6D	Boron, total	mg/L	0.899 J-	0.899	0.0552	Reported
G51D	UA	Compliance	10/25/2023	A6DR	Boron, total	mg/L	0.603	0.603	0.0552	Confirmed
G51D	UA	Compliance	01/30/2024	A7	Boron, total	mg/L	0.704	0.704	0.0552	Reported
G51D	UA	Compliance	04/22/2024	A7R	Boron, total	mg/L	0.784	0.784	0.0552	Confirmed
G51D	UA	Compliance	07/23/2024	A7D	Boron, total	mg/L	0.742	0.742	0.0552	Reported
G51D	UA	Compliance	10/21/2024	A7DR	Boron, total	mg/L	0.892	0.892	0.0552	Confirmed
G51D	UA	Compliance	09/25/2023	A6D	Calcium, total	mg/L	28.7	28.7	46.7	No Exceedance
G51D	UA	Compliance	10/25/2023	A6DR	Calcium, total	mg/L	31.5	31.5	46.7	No Exceedance
G51D	UA	Compliance	01/30/2024	A7	Calcium, total	mg/L	28.3	28.3	46.7	No Exceedance
G51D	UA	Compliance	04/22/2024	A7R	Calcium, total	mg/L	28.8	28.8	46.7	No Exceedance
G51D	UA	Compliance	07/23/2024	A7D	Calcium, total	mg/L	27.3	27.3	46.7	No Exceedance
G51D	UA	Compliance	10/21/2024	A7DR	Calcium, total	mg/L	26.8	26.8	46.7	No Exceedance
G51D	UA	Compliance	09/25/2023	A6D	Chloride, total	mg/L	4.00 J	4.00	29.4	No Exceedance
G51D	UA	Compliance	10/25/2023	A6DR	Chloride, total	mg/L	4.00	4.00	29.4	No Exceedance
G51D	UA	Compliance	01/30/2024	A7	Chloride, total	mg/L	4.00 J+	4.00	29.4	No Exceedance
G51D	UA	Compliance	04/22/2024	A7R	Chloride, total	mg/L	4.00 J	4.00	29.4	No Exceedance
G51D	UA	Compliance	07/23/2024	A7D	Chloride, total	mg/L	5.00	5.00	29.4	No Exceedance
G51D	UA	Compliance	10/21/2024	A7DR	Chloride, total	mg/L	4.1 J	2.5	29.4	No Exceedance
G51D	UA	Compliance	09/25/2023	A6D	Fluoride, total	mg/L	0.08 J	0.1	0.288	No Exceedance
G51D	UA	Compliance	10/25/2023	A6DR	Fluoride, total	mg/L	0.100 J+	0.100	0.288	No Exceedance
G51D	UA	Compliance	01/30/2024	A7	Fluoride, total	mg/L	0.08 J	0.1	0.288	No Exceedance
G51D	UA	Compliance	04/22/2024	A7R	Fluoride, total	mg/L	0.08 J	0.1	0.288	No Exceedance
G51D	UA	Compliance	07/23/2024	A7D	Fluoride, total	mg/L	0.110 J+	0.110	0.288	No Exceedance
G51D	UA	Compliance	10/21/2024	A7DR	Fluoride, total	mg/L	0.2 U	0.5	0.288	Exceedance Not Confirmed
G51D	UA	Compliance	09/25/2023	A6D	pH (field)	SU	5.4	5.4	6.2/6.9	Reported
G51D	UA	Compliance	10/25/2023	A6DR	pH (field)	SU	5.3	5.3	6.2/6.9	Confirmed
G51D	UA	Compliance	01/30/2024	A7	pH (field)	SU	5.5	5.5	6.2/6.9	Reported
G51D	UA	Compliance	04/22/2024	A7R	pH (field)	SU	5.4	5.4	6.2/6.9	Confirmed
G51D	UA	Compliance	07/23/2024	A7D	pH (field)	SU	5.6	5.6	6.2/6.9	Reported
G51D	UA	Compliance	10/21/2024	A7DR	pH (field)	SU	5.2	5.2	6.2/6.9	Confirmed
G51D	UA	Compliance	09/25/2023	A6D	Sulfate, total	mg/L	127 J	127	203	No Exceedance
G51D	UA	Compliance	10/25/2023	A6DR	Sulfate, total	mg/L	120	120	203	No Exceedance
G51D	UA	Compliance	01/30/2024	A7	Sulfate, total	mg/L	121	121	203	No Exceedance
G51D	UA	Compliance	04/22/2024	A7R	Sulfate, total	mg/L	116	116	203	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
G51D	UA	Compliance	07/23/2024	A7D	Sulfate, total	mg/L	118	118	203	No Exceedance
G51D	UA	Compliance	10/21/2024	A7DR	Sulfate, total	mg/L	102	102	203	No Exceedance
G51D	UA	Compliance	09/25/2023	A6D	Total Dissolved Solids	mg/L	292	292	541	No Exceedance
G51D	UA	Compliance	10/25/2023	A6DR	Total Dissolved Solids	mg/L	270	270	541	No Exceedance
G51D	UA	Compliance	01/30/2024	A7	Total Dissolved Solids	mg/L	325	325	541	No Exceedance
G51D	UA	Compliance	04/22/2024	A7R	Total Dissolved Solids	mg/L	288	288	541	No Exceedance
G51D	UA	Compliance	07/23/2024	A7D	Total Dissolved Solids	mg/L	328	328	541	No Exceedance
G51D	UA	Compliance	10/21/2024	A7DR	Total Dissolved Solids	mg/L	385	385	541	No Exceedance
G52D	UA	Compliance	09/26/2023	A6D	Boron, total	mg/L	0.03 UJ	0.025	0.0552	No Exceedance
G52D	UA	Compliance	10/24/2023	A6DR	Boron, total	mg/L	0.021 J	0.025	0.0552	No Exceedance
G52D	UA	Compliance	01/31/2024	A7	Boron, total	mg/L	0.03 UJ	0.025	0.0552	No Exceedance
G52D	UA	Compliance	04/23/2024	A7R	Boron, total	mg/L	0.025 UJ	0.025	0.0552	No Exceedance
G52D	UA	Compliance	07/23/2024	A7D	Boron, total	mg/L	0.018 J	0.025	0.0552	No Exceedance
G52D	UA	Compliance	10/22/2024	A7DR	Boron, total	mg/L	0.0251 J+	0.0251	0.0552	No Exceedance
G52D	UA	Compliance	09/26/2023	A6D	Calcium, total	mg/L	44.8	44.8	46.7	No Exceedance
G52D	UA	Compliance	10/24/2023	A6DR	Calcium, total	mg/L	47.9	47.9	46.7	Exceedance Not Confirmed
G52D	UA	Compliance	01/31/2024	A7	Calcium, total	mg/L	43.0	43.0	46.7	No Exceedance
G52D	UA	Compliance	04/23/2024	A7R	Calcium, total	mg/L	45.5	45.5	46.7	No Exceedance
G52D	UA	Compliance	07/23/2024	A7D	Calcium, total	mg/L	44.6	44.6	46.7	No Exceedance
G52D	UA	Compliance	10/22/2024	A7DR	Calcium, total	mg/L	43.7	43.7	46.7	No Exceedance
G52D	UA	Compliance	09/26/2023	A6D	Chloride, total	mg/L	11.0	11.0	29.4	No Exceedance
G52D	UA	Compliance	10/24/2023	A6DR	Chloride, total	mg/L	12.0	12.0	29.4	No Exceedance
G52D	UA	Compliance	01/31/2024	A7	Chloride, total	mg/L	11.0	11.0	29.4	No Exceedance
G52D	UA	Compliance	04/23/2024	A7R	Chloride, total	mg/L	11.0	11.0	29.4	No Exceedance
G52D	UA	Compliance	07/23/2024	A7D	Chloride, total	mg/L	12.0	12.0	29.4	No Exceedance
G52D	UA	Compliance	10/22/2024	A7DR	Chloride, total	mg/L	11.3	11.3	29.4	No Exceedance
G52D	UA	Compliance	09/26/2023	A6D	Fluoride, total	mg/L	0.280	0.280	0.288	No Exceedance
G52D	UA	Compliance	10/24/2023	A6DR	Fluoride, total	mg/L	0.290 J+	0.290	0.288	Exceedance Not Confirmed
G52D	UA	Compliance	01/31/2024	A7	Fluoride, total	mg/L	0.250	0.250	0.288	No Exceedance
G52D	UA	Compliance	04/23/2024	A7R	Fluoride, total	mg/L	0.270	0.270	0.288	No Exceedance
G52D	UA	Compliance	07/23/2024	A7D	Fluoride, total	mg/L	0.320 J+	0.320	0.288	Reported
G52D	UA	Compliance	10/22/2024	A7DR	Fluoride, total	mg/L	0.2 U	0.25	0.288	No Exceedance
G52D	UA	Compliance	09/26/2023	A6D	pH (field)	SU	6.3	6.3	6.2/6.9	No Exceedance
G52D	UA	Compliance	10/24/2023	A6DR	pH (field)	SU	6.3	6.3	6.2/6.9	No Exceedance
G52D	UA	Compliance	01/31/2024	A7	pH (field)	SU	6.3	6.3	6.2/6.9	No Exceedance
G52D	UA	Compliance	04/23/2024	A7R	pH (field)	SU	6.4	6.4	6.2/6.9	No Exceedance
G52D	UA	Compliance	07/23/2024	A7D	pH (field)	SU	6.7	6.7	6.2/6.9	No Exceedance
G52D	UA	Compliance	10/22/2024	A7DR	pH (field)	SU	6.2	6.2	6.2/6.9	No Exceedance
G52D	UA	Compliance	09/26/2023	A6D	Sulfate, total	mg/L	52.0	52.0	203	No Exceedance
G52D	UA	Compliance	10/24/2023	A6DR	Sulfate, total	mg/L	52.0	52.0	203	No Exceedance
G52D	UA	Compliance	01/31/2024	A7	Sulfate, total	mg/L	45.0	45.0	203	No Exceedance
G52D	UA	Compliance	04/23/2024	A7R	Sulfate, total	mg/L	40.0	40.0	203	No Exceedance
G52D	UA	Compliance	07/23/2024	A7D	Sulfate, total	mg/L	40.0	40.0	203	No Exceedance
G52D	UA	Compliance	10/22/2024	A7DR	Sulfate, total	mg/L	33.2	33.2	203	No Exceedance
G52D	UA	Compliance	09/26/2023	A6D	Total Dissolved Solids	mg/L	282	282	541	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
G52D	UA	Compliance	10/24/2023	A6DR	Total Dissolved Solids	mg/L	296	296	541	No Exceedance
G52D	UA	Compliance	01/31/2024	A7	Total Dissolved Solids	mg/L	296	296	541	No Exceedance
G52D	UA	Compliance	04/23/2024	A7R	Total Dissolved Solids	mg/L	280	280	541	No Exceedance
G52D	UA	Compliance	07/23/2024	A7D	Total Dissolved Solids	mg/L	324	324	541	No Exceedance
G52D	UA	Compliance	10/22/2024	A7DR	Total Dissolved Solids	mg/L	312 J+	312	541	No Exceedance
G53D	UA	Compliance	09/27/2023	A6D	Boron, total	mg/L	0.371	0.371	0.0552	Reported
G53D	UA	Compliance	10/25/2023	A6DR	Boron, total	mg/L	0.349	0.349	0.0552	Confirmed
G53D	UA	Compliance	01/30/2024	A7	Boron, total	mg/L	0.427	0.427	0.0552	Reported
G53D	UA	Compliance	04/23/2024	A7R	Boron, total	mg/L	0.377	0.377	0.0552	Confirmed
G53D	UA	Compliance	07/24/2024	A7D	Boron, total	mg/L	0.366	0.366	0.0552	Reported
G53D	UA	Compliance	10/22/2024	A7DR	Boron, total	mg/L	0.410 J+	0.410	0.0552	Confirmed
G53D	UA	Compliance	09/27/2023	A6D	Calcium, total	mg/L	35.9	35.9	46.7	No Exceedance
G53D	UA	Compliance	10/25/2023	A6DR	Calcium, total	mg/L	38.6	38.6	46.7	No Exceedance
G53D	UA	Compliance	01/30/2024	A7	Calcium, total	mg/L	37.5	37.5	46.7	No Exceedance
G53D	UA	Compliance	04/23/2024	A7R	Calcium, total	mg/L	38.5	38.5	46.7	No Exceedance
G53D	UA	Compliance	07/24/2024	A7D	Calcium, total	mg/L	38.7	38.7	46.7	No Exceedance
G53D	UA	Compliance	10/22/2024	A7DR	Calcium, total	mg/L	39.6	39.6	46.7	No Exceedance
G53D	UA	Compliance	09/27/2023	A6D	Chloride, total	mg/L	17.0	17.0	29.4	No Exceedance
G53D	UA	Compliance	10/25/2023	A6DR	Chloride, total	mg/L	18.0	18.0	29.4	No Exceedance
G53D	UA	Compliance	01/30/2024	A7	Chloride, total	mg/L	18.0	18.0	29.4	No Exceedance
G53D	UA	Compliance	04/23/2024	A7R	Chloride, total	mg/L	16.0	16.0	29.4	No Exceedance
G53D	UA	Compliance	07/24/2024	A7D	Chloride, total	mg/L	17.0	17.0	29.4	No Exceedance
G53D	UA	Compliance	10/22/2024	A7DR	Chloride, total	mg/L	15.5	15.5	29.4	No Exceedance
G53D	UA	Compliance	09/27/2023	A6D	Fluoride, total	mg/L	0.760	0.760	0.288	Reported
G53D	UA	Compliance	10/25/2023	A6DR	Fluoride, total	mg/L	0.740	0.740	0.288	Confirmed
G53D	UA	Compliance	01/30/2024	A7	Fluoride, total	mg/L	0.650	0.650	0.288	Reported
G53D	UA	Compliance	04/23/2024	A7R	Fluoride, total	mg/L	0.690	0.690	0.288	Confirmed
G53D	UA	Compliance	07/24/2024	A7D	Fluoride, total	mg/L	0.740	0.740	0.288	Reported
G53D	UA	Compliance	10/22/2024	A7DR	Fluoride, total	mg/L	0.590	0.590	0.288	Confirmed
G53D	UA	Compliance	09/27/2023	A6D	pH (field)	SU	6.5	6.5	6.2/6.9	No Exceedance
G53D	UA	Compliance	10/25/2023	A6DR	pH (field)	SU	6.5	6.5	6.2/6.9	No Exceedance
G53D	UA	Compliance	01/30/2024	A7	pH (field)	SU	6.5	6.5	6.2/6.9	No Exceedance
G53D	UA	Compliance	04/23/2024	A7R	pH (field)	SU	6.4	6.4	6.2/6.9	No Exceedance
G53D	UA	Compliance	07/24/2024	A7D	pH (field)	SU	6.4	6.4	6.2/6.9	No Exceedance
G53D	UA	Compliance	10/22/2024	A7DR	pH (field)	SU	6.2	6.2	6.2/6.9	No Exceedance
G53D	UA	Compliance	09/27/2023	A6D	Sulfate, total	mg/L	73.0	73.0	203	No Exceedance
G53D	UA	Compliance	10/25/2023	A6DR	Sulfate, total	mg/L	69.0	69.0	203	No Exceedance
G53D	UA	Compliance	01/30/2024	A7	Sulfate, total	mg/L	70.0	70.0	203	No Exceedance
G53D	UA	Compliance	04/23/2024	A7R	Sulfate, total	mg/L	72.0	72.0	203	No Exceedance
G53D	UA	Compliance	07/24/2024	A7D	Sulfate, total	mg/L	67.0	67.0	203	No Exceedance
G53D	UA	Compliance	10/22/2024	A7DR	Sulfate, total	mg/L	59.0	59.0	203	No Exceedance
G53D	UA	Compliance	09/27/2023	A6D	Total Dissolved Solids	mg/L	330	330	541	No Exceedance
G53D	UA	Compliance	10/25/2023	A6DR	Total Dissolved Solids	mg/L	312	312	541	No Exceedance
G53D	UA	Compliance	01/30/2024	A7	Total Dissolved Solids	mg/L	325	325	541	No Exceedance
G53D	UA	Compliance	04/23/2024	A7R	Total Dissolved Solids	mg/L	316	316	541	No Exceedance
G53D	UA	Compliance	07/24/2024	A7D	Total Dissolved Solids	mg/L	332	332	541	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
G53D	UA	Compliance	10/22/2024	A7DR	Total Dissolved Solids	mg/L	354 J+	354	541	No Exceedance
G54D	UA	Compliance	09/26/2023	A6D	Boron, total	mg/L	0.404	0.404	0.0552	Reported
G54D	UA	Compliance	10/25/2023	A6DR	Boron, total	mg/L	0.396	0.396	0.0552	Confirmed
G54D	UA	Compliance	01/31/2024	A7	Boron, total	mg/L	0.804	0.804	0.0552	Reported
G54D	UA	Compliance	04/22/2024	A7R	Boron, total	mg/L	0.993	0.993	0.0552	Confirmed
G54D	UA	Compliance	07/23/2024	A7D	Boron, total	mg/L	0.726	0.726	0.0552	Reported
G54D	UA	Compliance	10/22/2024	A7DR	Boron, total	mg/L	0.752	0.752	0.0552	Confirmed
G54D	UA	Compliance	09/26/2023	A6D	Calcium, total	mg/L	81.2	81.2	46.7	Reported
G54D	UA	Compliance	10/25/2023	A6DR	Calcium, total	mg/L	87.5	87.5	46.7	Confirmed
G54D	UA	Compliance	01/31/2024	A7	Calcium, total	mg/L	93.3	93.3	46.7	Reported
G54D	UA	Compliance	04/22/2024	A7R	Calcium, total	mg/L	95.9	95.9	46.7	Confirmed
G54D	UA	Compliance	07/23/2024	A7D	Calcium, total	mg/L	95.2	95.2	46.7	Reported
G54D	UA	Compliance	10/22/2024	A7DR	Calcium, total	mg/L	92.7	92.7	46.7	Confirmed
G54D	UA	Compliance	09/26/2023	A6D	Chloride, total	mg/L	20.0	20.0	29.4	No Exceedance
G54D	UA	Compliance	10/25/2023	A6DR	Chloride, total	mg/L	23.0	23.0	29.4	No Exceedance
G54D	UA	Compliance	01/31/2024	A7	Chloride, total	mg/L	21.0	21.0	29.4	No Exceedance
G54D	UA	Compliance	04/22/2024	A7R	Chloride, total	mg/L	20.0	20.0	29.4	No Exceedance
G54D	UA	Compliance	07/23/2024	A7D	Chloride, total	mg/L	21.0	21.0	29.4	No Exceedance
G54D	UA	Compliance	10/22/2024	A7DR	Chloride, total	mg/L	19.6	19.6	29.4	No Exceedance
G54D	UA	Compliance	09/26/2023	A6D	Fluoride, total	mg/L	0.300	0.300	0.288	Reported
G54D	UA	Compliance	10/25/2023	A6DR	Fluoride, total	mg/L	0.310 J+	0.310	0.288	Confirmed
G54D	UA	Compliance	01/31/2024	A7	Fluoride, total	mg/L	0.270	0.270	0.288	No Exceedance
G54D	UA	Compliance	04/22/2024	A7R	Fluoride, total	mg/L	0.290	0.290	0.288	Exceedance Not Confirmed
G54D	UA	Compliance	07/23/2024	A7D	Fluoride, total	mg/L	0.330 J+	0.330	0.288	Reported
G54D	UA	Compliance	10/22/2024	A7DR	Fluoride, total	mg/L	0.2 U	0.25	0.288	No Exceedance
G54D	UA	Compliance	09/26/2023	A6D	pH (field)	SU	6.6	6.6	6.2/6.9	No Exceedance
G54D	UA	Compliance	10/25/2023	A6DR	pH (field)	SU	6.6	6.6	6.2/6.9	No Exceedance
G54D	UA	Compliance	01/31/2024	A7	pH (field)	SU	6.5	6.5	6.2/6.9	No Exceedance
G54D	UA	Compliance	04/22/2024	A7R	pH (field)	SU	6.6	6.6	6.2/6.9	No Exceedance
G54D	UA	Compliance	07/23/2024	A7D	pH (field)	SU	6.7	6.7	6.2/6.9	No Exceedance
G54D	UA	Compliance	10/22/2024	A7DR	pH (field)	SU	6.8	6.8	6.2/6.9	No Exceedance
G54D	UA	Compliance	09/26/2023	A6D	Sulfate, total	mg/L	180	180	203	No Exceedance
G54D	UA	Compliance	10/25/2023	A6DR	Sulfate, total	mg/L	192	192	203	No Exceedance
G54D	UA	Compliance	01/31/2024	A7	Sulfate, total	mg/L	197	197	203	No Exceedance
G54D	UA	Compliance	04/22/2024	A7R	Sulfate, total	mg/L	199	199	203	No Exceedance
G54D	UA	Compliance	07/23/2024	A7D	Sulfate, total	mg/L	212	212	203	Reported
G54D	UA	Compliance	10/22/2024	A7DR	Sulfate, total	mg/L	198	198	203	No Exceedance
G54D	UA	Compliance	09/26/2023	A6D	Total Dissolved Solids	mg/L	508	508	541	No Exceedance
G54D	UA	Compliance	10/25/2023	A6DR	Total Dissolved Solids	mg/L	502	502	541	No Exceedance
G54D	UA	Compliance	01/31/2024	A7	Total Dissolved Solids	mg/L	530	530	541	No Exceedance
G54D	UA	Compliance	04/22/2024	A7R	Total Dissolved Solids	mg/L	492	492	541	No Exceedance
G54D	UA	Compliance	07/23/2024	A7D	Total Dissolved Solids	mg/L	568	568	541	Reported
G54D	UA	Compliance	10/22/2024	A7DR	Total Dissolved Solids	mg/L	568 J	568	541	Confirmed

Notes:

-- = not applicable
Comparison Value is different from the Result when the Result is below the Reporting Limit (RL). The Result will not be used in statistical calculations due to the inherent uncertainty in results that are below the RL. Half of the RL will be substituted for these data. See the *Multi-Site Statistical Analysis Plan* (Ramboll, 2022a) for more information.
Event IDs:

- A6D = Quarter 3, 2023 Assessment Monitoring sampling event
- A6DR = Quarter 4, 2023 Assessment Monitoring resampling event
- A7 = Quarter 1, 2024 Assessment Monitoring sampling event
- A7R = Quarter 2, 2024 Assessment Monitoring resampling event
- A7D = Quarter 3, 2024 Assessment Monitoring sampling event
- A7DR = Quarter 4, 2024 Assessment Monitoring resampling event

HSU = hydrostratigraphic unit:

- UA = Uppermost Aquifer

ID = identification

mg/L = milligrams per liter

Result Code (if applicable):

- NR¹ = Parameter not analyzed.
- NS¹ = Well has been, or will be, abandoned; therefore, a sample was not collected.
- NS² = Well either needs or was undergoing maintenance; therefore, a sample was not collected.
- NS³ = The location was not accessible; therefore, a sample was not collected.
- NS⁴ = The location could not be found; therefore, a sample was not collected.
- NS⁵ = The location was damaged; therefore, a sample was not collected.
- NS⁶ = Sampling pump could not yield a sample.
- NS⁷ = Well was either dry or purged dry and did not recover sufficiently to yield adequate volume for a sample.
- NS⁸ = A sample was not collected.
- PM¹ = Parameter not analyzed as the well purged dry during sample collection and did not sufficiently recover to yield adequate sample volume for analysis.

Result qualifiers as defined in the United States Environmental Protection Agency’s *National Functional Guidelines for Inorganic Superfund Methods Data Review*, EPA 542-R-20-006. November 2020.:

- J- = The result is an estimated quantity, but the result may be biased low.
- 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.

Statistically Significant Increase (SSI) Type:

- No Exceedance: No exceedance of the background.
- Exceedance Not Confirmed: An exceedance was determined in the parent event, a resample was collected, and the resample did not confirm the exceedance; or an exceedance was not determined in the parent event but a subsequent sample collected exhibited a concentration higher than background.
- Reported: An exceedance in the parent event was observed and reported.
- Confirmed: A resample confirmed an observed exceedance in the parent event.

SU = Standard Units

TABLE 3
ANALYTICAL RESULTS - APPENDIX IV PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

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)
G01D	B	01/29/2024	A7	0.0004 U	0.00570	0.289	0.0008 J	0.0002 U	0.0213	0.0172	0.170	0.0100	0.00580	0.00006 U	0.00150 J	5.85	0.0009 J	0.001 U
G01D	B	04/22/2024	A7R	0.0006 U	0.0008 J	0.218	0.0002 U	0.0002 U	0.00460	0.00150	0.200	0.00110	0.0017 J	0.000350	0.0007 J	2.04	0.00130	0.001 U
G01D	B	07/23/2024	A7D	0.0004 U	0.001 UJ	0.217	0.0006 J	0.0002 U	0.00290	0.00120	0.180 J+	0.0006 J	0.0015 J	0.00006 U	0.0006 U	0.311	0.00110	0.001 U
G01D	B	10/21/2024	A7DR	0.0004 U	0.0007 J	0.208	0.0002 U	0.0002 U	0.00250	0.00110	0.2 U	0.0007 J	0.0018 J	0.00006 U	0.0015 UJ	0.309	0.00130	0.001 U
G02D	B	01/29/2024	A7	0.0004 U	0.0004 U	0.207	0.0002 U	0.0002 U	0.002 UJ	0.0001 U	0.190	0.0006 U	0.0015 U	0.00006 U	0.0006 U	0.968	0.00120	0.001 U
G02D	B	04/22/2024	A7R	0.0006 U	0.0004 U	0.180	0.0002 U	0.0002 U	0.0012 J	0.0002 J	0.220	0.0006 U	0.0015 U	0.000270	0.0006 U	0.813	0.00140	0.001 U
G02D	B	07/23/2024	A7D	0.0004 U	0.0004 U	0.189	0.0002 U	0.0002 U	0.0011 J	0.0001 U	0.200 J+	0.0006 U	0.0015 U	0.00006 U	0.0006 U	0.755	0.00230	0.001 U
G02D	B	10/21/2024	A7DR	0.0004 U	0.0004 U	0.191	0.0002 U	0.0002 U	0.0007 U	0.0001 U	0.2 U	0.0006 U	0.0015 U	0.00006 U	0.0006 U	1.16	0.00210	0.001 U
G03	C	01/30/2024	A7	0.0004 U	0.00340	0.0733	0.0007 J	0.0002 U	0.0132	0.00650	0.190	0.00330	0.0027 J	0.00006 U	0.0012 J	0.254	0.0006 U	0.001 U
G03	C	04/22/2024	A7R	0.0006 U	0.00160	0.0647	0.0003 J	0.0002 U	0.00850	0.00230	0.210	0.00170	0.0023 J	0.000440	0.0006 U	1.66	0.0006 U	0.0016 J
G03	C	07/23/2024	A7D	0.0004 U	0.00170 J+	0.0674	0.0004 J	0.0002 U	0.0108	0.00380	0.220 J+	0.00270	0.00340	0.00006 U	0.001 J	1.30	0.0006 U	0.001 U
G03	C	10/21/2024	A7DR	0.0009 J	0.00220	0.0649	0.0005 J	0.0002 U	0.0115	0.00560	0.2 U	0.00290	0.00440	0.00006 U	0.0015 UJ	0.366	0.0007 J	0.001 U
G05	C	01/31/2024	A7	0.0004 U	0.00140	0.189	0.0003 J	0.0002 U	0.00840 J+	0.00300	0.350	0.00330	0.00360	0.00006 U	0.00500	3.38	0.00120	0.001 U
G05	C	04/23/2024	A7R	0.0008 J	0.0009 J	0.208	0.0002 U	0.0002 U	0.00290	0.00250	0.380	0.0007 J	0.0029 J	0.000320	0.00400	1.96	0.00170	0.001 U
G05	C	07/24/2024	A7D	0.0004 U	0.00100 J+	0.186	0.0002 U	0.0002 U	0.00170	0.00210	0.400 J+	0.0006 U	0.0015 U	0.00006 U	0.00430	0.993	0.00200	0.001 U
G05	C	10/22/2024	A7DR	0.001 UJ	0.00100	0.217	0.0002 U	0.0002 U	0.001 J	0.00120	0.28 J	0.0006 U	0.00330 J+	0.00006 U	0.00550 J+	1.37	0.0008 J	0.001 U
G06	C	01/30/2024	A7	0.0005 J	0.0116	0.136	0.00170	0.0002 U	0.0488	0.0151	0.230	0.0160	0.0112	0.00006 U	0.00230	5.08	0.0006 U	0.001 U
G06	C	04/23/2024	A7R	0.0006 U	0.00200	0.0453	0.0003 J	0.0002 U	0.00840	0.00210	0.260	0.00240	0.00620	0.000310	0.0006 U	1.72	0.0006 U	0.001 U
G06	C	07/24/2024	A7D	0.00100	0.00170 J+	0.0430	0.0003 J	0.0002 U	0.00830	0.00170	0.270 J+	0.00230	0.00430	0.00006 U	0.0009 J	1.08	0.0006 U	0.001 U
G06	C	10/22/2024	A7DR	0.001 UJ	0.00310	0.0519	0.0004 J	0.0002 U	0.0143	0.00330	0.2 U	0.00400	0.00780 J+	0.00006 U	0.0015 UJ	1.08	0.0006 U	0.001 U
G07	C	01/30/2024	A7	0.0004 U	0.00540	0.182	0.00100 J	0.0002 U	0.0284	0.00520	0.380	0.00540	0.00630	0.00006 U	0.00190	3.14	0.0006 U	0.001 U
G07	C	04/23/2024	A7R	0.0006 U	0.00690	0.265	0.00150	0.0002 U	0.0514	0.00660	0.420	0.0106	0.0102	0.000210	0.00210	2.66	0.0006 U	0.001 U
G07	C	07/24/2024	A7D	0.0008 U	0.001 UJ	0.0563	0.0002 U	0.0002 U	0.00590	0.00130	0.440 J+	0.00120	0.00300	0.00006 U	0.0007 J	0.396	0.0006 U	0.001 U
G07	C	10/22/2024	A7DR	0.00220 J+	0.00280	0.108	0.0006 J	0.0002 U	0.0190	0.00320	0.33 J	0.00420	0.00760 J+	0.00006 U	0.0015 UJ	0.944	0.0006 U	0.001 U
G08	C	01/30/2024	A7	0.0004 U	0.0183	0.142	0.0007 J	0.00100 J	0.0153	0.0126	0.260	0.00510	0.00410	0.00006 U	0.00290	3.01	0.0006 U	0.0013 J
G08	C	04/23/2024	A7R	0.0006 U	0.00440	0.0524	0.0002 U	0.0002 U	0.00360	0.00370	0.280	0.0007 J	0.00310	0.000210	0.0014 J	1.66	0.0006 U	0.001 U
G08	C	07/24/2024	A7D	0.0008 U	0.00640	0.0400	0.0002 U	0.0002 U	0.00250	0.00340	0.300 J+	0.0007 J	0.0018 J	0.00006 U	0.00180	0.514	0.0006 U	0.001 U

TABLE 3
ANALYTICAL RESULTS - APPENDIX IV PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

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)
G08	C	10/22/2024	A7DR	0.001 UJ	0.0163	0.122	0.0007 J	0.0006 J	0.0177	0.0115	0.2 J	0.00490	0.00620 J+	0.00006 U	0.00300 J+	2.17	0.0006 U	0.001 U
G09	C	02/01/2024	A7	0.0007 J	0.0140	0.0942	0.00330	0.0003 J	0.0298	0.00920	0.250	0.00840	0.00590	0.00006 U	0.0013 J	2.27	0.0006 U	0.001 U
G09	C	04/23/2024	A7R	0.0008 J	0.00610	0.0642	0.00130	0.0002 U	0.0179	0.00510	0.270	0.00390	0.00460	0.000230	0.0009 J	0.948	0.0006 U	0.001 U
G09	C	07/23/2024	A7D	0.00190	0.00520	0.0630	0.00110	0.0002 U	0.0128	0.00460	0.320 J+	0.00320	0.00460	0.00006 U	0.001 J	0.533	0.0006 U	0.001 U
G09	C	10/22/2024	A7DR	0.001 UJ	0.00280	0.0349	0.0004 J	0.0002 U	0.00380	0.00310	0.2 U	0.0009 J	0.00450 J+	0.00006 U	0.0015 UJ	0.295	0.0006 U	0.001 U
G10	C	01/30/2024	A7	0.0004 U	0.0156	0.128	0.00250	0.0002 J	0.0511	0.0114	0.870	0.0102	0.0256	0.00006 U	0.00620	3.22	0.0006 U	0.001 U
G10	C	04/22/2024	A7R	0.0006 U	0.0120	0.0515	0.0005 J	0.0002 U	0.00700	0.00350	0.490	0.00130	0.00950	0.000280	0.00220	1.45	0.0006 U	0.001 U
G10	C	07/24/2024	A7D	0.0008 U	0.00500	0.0376	0.0002 U	0.0002 U	0.00240	0.00240	0.680	0.0006 U	0.0151	0.00006 U	0.00180	1.10	0.0006 U	0.001 U
G10	C	10/21/2024	A7DR	0.0006 J	0.151	0.119	0.00250	0.0002 U	0.00740	0.00580	0.44 J	0.00150	0.0214	0.00006 U	0.00360 J+	6.67	0.0008 J	0.001 U
G11	C	01/30/2024	A7	0.0004 U	0.00160	0.0656	0.0003 J	0.0002 U	0.00660 J+	0.00780	0.180	0.00150	0.00400	0.00009 U	0.0009 J	2.33	0.00170	0.001 U
G11	C	04/22/2024	A7R	0.0006 U	0.0004 U	0.0234	0.0002 U	0.0002 U	0.001 J	0.0009 J	0.200	0.0006 U	0.00390	0.00017 J	0.0009 J	0.793	0.00130	0.001 U
G11	C	07/23/2024	A7D	0.00100 J	0.0004 U	0.0190	0.0002 U	0.0002 U	0.001 J	0.0009 J	0.240 J+	0.0006 U	0.00400	0.00006 U	0.0006 J	0.426	0.00260	0.001 U
G11	C	10/21/2024	A7DR	0.0004 U	0.0009 J	0.0322	0.0003 J	0.0002 U	0.00250	0.00340	0.2 U	0.0006 U	0.00550	0.00006 U	0.0015 UJ	0.121	0.00200	0.001 U
G51D	C	01/30/2024	A7	0.0004 U	0.0004 U	0.0346	0.0002 U	0.0002 U	0.00210 J+	0.00120	0.08 J	0.0006 U	0.00540	0.00009 U	0.0006 U	1.75	0.00490	0.001 U
G51D	C	04/22/2024	A7R	0.0006 U	0.0004 U	0.0344	0.0002 U	0.0002 U	0.00180	0.0008 J	0.08 J	0.0006 U	0.00650	0.00012 U	0.0006 U	1.35	0.00540	0.001 U
G51D	C	07/23/2024	A7D	0.0004 U	0.0004 U	0.0365	0.0002 U	0.0002 U	0.00150	0.0008 J	0.110 J+	0.0006 U	0.00550	0.00006 U	0.0006 U	0.676	0.00580	0.001 U
G51D	C	10/21/2024	A7DR	0.0004 U	0.0008 J	0.0436	0.0003 J	0.0002 U	0.00310	0.00150	0.2 U	0.00110	0.00810	0.00006 U	0.0006 U	0.149	0.00650	0.001 U
G52D	C	01/31/2024	A7	0.0004 U	0.00130	0.213	0.0002 U	0.0002 U	0.0008 U	0.00340	0.250	0.0006 U	0.0024 J	0.00009 U	0.0008 J	1.79	0.0006 U	0.001 U
G52D	C	04/23/2024	A7R	0.0006 U	0.00120	0.259	0.0002 U	0.0002 U	0.0011 J	0.00350	0.270	0.0006 U	0.0026 J	0.000200 J	0.0007 J	1.17	0.0006 U	0.001 U
G52D	C	07/23/2024	A7D	0.0004 U	0.00120 J+	0.286	0.0002 U	0.0002 U	0.0007 U	0.00380	0.320 J+	0.0006 U	0.00300	0.00006 U	0.0007 J	1.25	0.0006 U	0.001 U
G52D	C	10/22/2024	A7DR	0.0004 U	0.00160	0.291	0.0002 U	0.0002 U	0.0007 U	0.00410	0.2 U	0.0006 U	0.00360 J+	0.00006 U	0.0015 UJ	1.42	0.0006 U	0.001 U
G53D	C	01/30/2024	A7	0.0004 U	0.0008 J	0.110	0.0003 J	0.0002 U	0.00250 J+	0.00280	0.650	0.0008 J	0.0019 J	0.00009 U	0.0006 U	0.798	0.0006 U	0.001 U
G53D	C	04/23/2024	A7R	0.0008 J	0.0004 J	0.103	0.0002 U	0.0002 U	0.00290	0.00190	0.690	0.0009 J	0.0022 J	0.000210	0.0006 U	0.318	0.0006 U	0.001 U
G53D	C	07/24/2024	A7D	0.0008 U	0.0004 U	0.0908	0.0002 U	0.0002 U	0.0007 U	0.00100	0.740	0.0006 U	0.0015 U	0.00006 U	0.0006 U	0.180	0.0006 U	0.001 U
G53D	C	10/22/2024	A7DR	0.0004 U	0.0006 J	0.0955	0.0002 U	0.0002 U	0.0007 U	0.00100 J	0.590	0.0006 U	0.003 UJ	0.00006 U	0.0015 UJ	0.534	0.0006 U	0.001 U
G54D	C	01/31/2024	A7	0.0004 U	0.0007 J	0.0704	0.0002 U	0.0002 U	0.002 UJ	0.0104	0.270	0.0006 U	0.00370	0.00009 U	0.0006 U	0.592	0.0006 U	0.001 U
G54D	C	04/22/2024	A7R	0.0006 U	0.0005 J	0.0620	0.0002 U	0.0002 U	0.0008 J	0.00870	0.290	0.0006 U	0.00300 J	0.000220	0.0006 U	0.427	0.0006 U	0.001 U

TABLE 3
ANALYTICAL RESULTS - APPENDIX IV PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

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)
G54D	C	07/23/2024	A7D	0.0008 U	0.001 UJ	0.0663	0.0002 U	0.0002 U	0.0007 U	0.00830	0.330 J+	0.0006 U	0.0028 J	0.00006 U	0.0006 U	0.447	0.0006 U	0.001 U
G54D	C	10/22/2024	A7DR	0.0004 U	0.0007 J	0.0694	0.0002 U	0.0002 U	0.0007 U	0.00900	0.2 U	0.0006 U	0.00400 J+	0.00006 U	0.0015 UJ	0.447	0.0006 U	0.001 U

Notes:
Data qualifiers as defined in the United States Environmental Protection Agency’s *National Functional Guidelines for Inorganic Superfund Methods Data Review* (2020):
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.

Event IDs:
A7 = Quarter 1, 2024 Assessment Monitoring sampling event
A7R = Quarter 2, 2024 Assessment Monitoring resampling event
A7D = Quarter 3, 2024 Assessment Monitoring sampling event
A7DR = Quarter 4, 2024 Assessment Monitoring resampling event

ID = identification
mg/L = milligrams per liter
pCi/L = picoCuries per liter
Result Code (if applicable):
NR¹ = Parameter not analyzed.
NS¹ = Well has been, or will be, abandoned; therefore, a sample was not collected.
NS² = Well either needs or was undergoing maintenance; therefore, a sample was not collected.
NS³ = The location was not accessible; therefore, a sample was not collected.
NS⁴ = The location could not be found; therefore, a sample was not collected.
NS⁵ = The location was damaged; therefore, a sample was not collected.
NS⁶ = Sampling pump could not yield a sample.
NS⁷ = Well was either dry or purged dry and did not recover sufficiently to yield adequate volume for a sample.
NS⁸ = A sample was not collected.
PM¹ = Parameter not analyzed as the well purged dry during sample collection and did not sufficiently recover to yield adequate sample volume for analysis.

Well Type:
B = Background
C = Compliance

TABLE 4
STATISTICAL BACKGROUND VALUES
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Parameter	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Background Value (LPL / UPL)
Boron (mg/L)	12/03/2015 - 07/20/2017	16	31	Non-parametric UPL	0.0552
Calcium (mg/L)	12/03/2015 - 07/20/2017	16	0	Parametric UPL	46.7
Chloride (mg/L)	12/03/2015 - 07/20/2017	16	0	Parametric UPL	29.4
Fluoride (mg/L)	12/03/2015 - 07/20/2017	16	0	Parametric UPL	0.288
pH (field) (SU)	12/03/2015 - 07/20/2017	16	0	Non-parametric LPL/UPL	6.2/6.9
Sulfate (mg/L)	12/03/2015 - 07/20/2017	16	0	Parametric UPL (log-transformed)	203
Total Dissolved Solids (mg/L)	12/03/2015 - 07/20/2017	16	0	Parametric UPL	541

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

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TABLE 5
GROUNDWATER PROTECTION STANDARDS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Parameter	Background					MCL / HBL	Groundwater Protection Standard *	Groundwater Protection Standard Source
	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Value			
Antimony (mg/L)	12/03/2015 - 07/20/2017	16	100	All ND - Last Reporting Limit	0.001	0.006	0.006	MCL/HBL
Arsenic (mg/L)	12/03/2015 - 07/20/2017	16	62	Non-parametric UTL	0.00260	0.010	0.010	MCL/HBL
Barium (mg/L)	12/03/2015 - 07/20/2017	16	0	Parametric UTL	0.300	2.0	2.0	MCL/HBL
Beryllium (mg/L)	12/03/2015 - 07/20/2017	16	100	All ND - Last Reporting Limit	0.001	0.004	0.004	MCL/HBL
Cadmium (mg/L)	12/03/2015 - 07/20/2017	16	100	All ND - Last Reporting Limit	0.001	0.005	0.005	MCL/HBL
Chromium (mg/L)	12/03/2015 - 07/20/2017	16	38	Parametric UTL (log-transformed)	0.00930	0.1	0.1	MCL/HBL
Cobalt (mg/L)	12/03/2015 - 07/20/2017	16	38	Parametric UTL (log-transformed)	0.0366	0.006	0.0366	Background
Fluoride (mg/L)	12/03/2015 - 07/20/2017	16	0	Parametric UTL	0.301	4.0	4.0	MCL/HBL
Lead (mg/L)	12/03/2015 - 07/20/2017	16	62	Non-parametric UTL	0.00180	0.015	0.015	MCL/HBL
Lithium (mg/L)	12/03/2015 - 07/20/2017	16	19	Parametric UTL	0.00238	0.04	0.04	MCL/HBL
Mercury (mg/L)	12/03/2015 - 07/20/2017	16	100	All ND - Last Reporting Limit	0.0002	0.002	0.002	MCL/HBL
Molybdenum (mg/L)	12/03/2015 - 07/20/2017	16	69	Non-parametric UTL	0.00180	0.1	0.1	MCL/HBL
Radium 226 + Radium 228 (pCi/L)	12/03/2015 - 07/20/2017	16	0	Parametric UTL	1.51	5	5	MCL/HBL
Selenium (mg/L)	12/03/2015 - 07/20/2017	16	50	Non-parametric UTL	0.00390	0.05	0.05	MCL/HBL
Thallium (mg/L)	12/03/2015 - 07/20/2017	16	100	All ND - Last Reporting Limit	0.001	0.002	0.002	MCL/HBL

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

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G03	UA	A6D	Antimony, total	mg/L	03/05/21 - 09/26/23	12	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G03	UA	A6DR	Antimony, total	mg/L	03/05/21 - 10/23/23	13	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G03	UA	A7	Antimony, total	mg/L	03/05/21 - 01/30/24	14	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G03	UA	A7R	Antimony, total	mg/L	03/05/21 - 04/22/24	15	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G03	UA	A7D	Antimony, total	mg/L	03/05/21 - 07/23/24	16	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G03	UA	A7DR	Antimony, total	mg/L	03/05/21 - 10/21/24	17	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G03	UA	A6D	Arsenic, total	mg/L	03/05/21 - 09/26/23	12	41	CI around geomean	0.00110	0.010	MCL/HBL	No Exceedance
G03	UA	A6DR	Arsenic, total	mg/L	03/05/21 - 10/23/23	13	46	CI around geomean	0.00108	0.010	MCL/HBL	No Exceedance
G03	UA	A7	Arsenic, total	mg/L	03/05/21 - 01/30/24	14	42	CI around geomean	0.00114	0.010	MCL/HBL	No Exceedance
G03	UA	A7R	Arsenic, total	mg/L	03/05/21 - 04/22/24	15	40	CI around geomean	0.00113	0.010	MCL/HBL	No Exceedance
G03	UA	A7D	Arsenic, total	mg/L	03/05/21 - 07/23/24	16	37	CI around geomean	0.00117	0.010	MCL/HBL	No Exceedance
G03	UA	A7DR	Arsenic, total	mg/L	03/05/21 - 10/21/24	17	35	CI around geomean	0.00121	0.010	MCL/HBL	No Exceedance
G03	UA	A6D	Barium, total	mg/L	03/05/21 - 09/26/23	12	0	CI around mean	0.0590	2.0	MCL/HBL	No Exceedance
G03	UA	A6DR	Barium, total	mg/L	03/05/21 - 10/23/23	13	0	CI around mean	0.0596	2.0	MCL/HBL	No Exceedance
G03	UA	A7	Barium, total	mg/L	03/05/21 - 01/30/24	14	0	CI around mean	0.0607	2.0	MCL/HBL	No Exceedance
G03	UA	A7R	Barium, total	mg/L	03/05/21 - 04/22/24	15	0	CI around mean	0.0611	2.0	MCL/HBL	No Exceedance
G03	UA	A7D	Barium, total	mg/L	03/05/21 - 07/23/24	16	0	CI around mean	0.0615	2.0	MCL/HBL	No Exceedance
G03	UA	A7DR	Barium, total	mg/L	03/05/21 - 10/21/24	17	0	CI around mean	0.0618	2.0	MCL/HBL	No Exceedance
G03	UA	A6D	Beryllium, total	mg/L	03/05/21 - 09/26/23	12	91	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G03	UA	A6DR	Beryllium, total	mg/L	03/05/21 - 10/23/23	13	92	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G03	UA	A7	Beryllium, total	mg/L	03/05/21 - 01/30/24	14	92	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G03	UA	A7R	Beryllium, total	mg/L	03/05/21 - 04/22/24	15	93	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G03	UA	A7D	Beryllium, total	mg/L	03/05/21 - 07/23/24	16	93	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G03	UA	A7DR	Beryllium, total	mg/L	03/05/21 - 10/21/24	17	94	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G03	UA	A6D	Cadmium, total	mg/L	03/05/21 - 09/26/23	12	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G03	UA	A6DR	Cadmium, total	mg/L	03/05/21 - 10/23/23	13	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G03	UA	A7	Cadmium, total	mg/L	03/05/21 - 01/30/24	14	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G03	UA	A7R	Cadmium, total	mg/L	03/05/21 - 04/22/24	15	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G03	UA	A7D	Cadmium, total	mg/L	03/05/21 - 07/23/24	16	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G03	UA	A7DR	Cadmium, total	mg/L	03/05/21 - 10/21/24	17	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G03	UA	A6D	Chromium, total	mg/L	03/05/21 - 09/26/23	12	8	CI around mean	0.00291	0.1	MCL/HBL	No Exceedance
G03	UA	A6DR	Chromium, total	mg/L	03/05/21 - 10/23/23	13	7	CI around mean	0.00279	0.1	MCL/HBL	No Exceedance
G03	UA	A7	Chromium, total	mg/L	03/05/21 - 01/30/24	14	7	CI around mean	0.00352	0.1	MCL/HBL	No Exceedance
G03	UA	A7R	Chromium, total	mg/L	03/05/21 - 04/22/24	15	6	CI around mean	0.00392	0.1	MCL/HBL	No Exceedance
G03	UA	A7D	Chromium, total	mg/L	03/05/21 - 07/23/24	16	6	CI around mean	0.00438	0.1	MCL/HBL	No Exceedance
G03	UA	A7DR	Chromium, total	mg/L	03/05/21 - 10/21/24	17	5	CI around mean	0.00482	0.1	MCL/HBL	No Exceedance
G03	UA	A6D	Cobalt, total	mg/L	03/05/21 - 09/26/23	12	25	CI around geomean	0.00140	0.0366	Background	No Exceedance
G03	UA	A6DR	Cobalt, total	mg/L	03/05/21 - 10/23/23	13	30	CI around geomean	0.00133	0.0366	Background	No Exceedance
G03	UA	A7	Cobalt, total	mg/L	03/05/21 - 01/30/24	14	28	CI around geomean	0.00145	0.0366	Background	No Exceedance
G03	UA	A7R	Cobalt, total	mg/L	03/05/21 - 04/22/24	15	26	CI around geomean	0.00151	0.0366	Background	No Exceedance
G03	UA	A7D	Cobalt, total	mg/L	03/05/21 - 07/23/24	16	25	CI around geomean	0.00160	0.0366	Background	No Exceedance
G03	UA	A7DR	Cobalt, total	mg/L	03/05/21 - 10/21/24	17	23	CI around geomean	0.00170	0.0366	Background	No Exceedance
G03	UA	A6D	Fluoride, total	mg/L	03/05/21 - 09/26/23	12	0	CI around mean	0.191	4.0	MCL/HBL	No Exceedance
G03	UA	A6DR	Fluoride, total	mg/L	03/05/21 - 10/23/23	13	0	CI around mean	0.192	4.0	MCL/HBL	No Exceedance
G03	UA	A7	Fluoride, total	mg/L	03/05/21 - 01/30/24	14	0	CI around mean	0.191	4.0	MCL/HBL	No Exceedance
G03	UA	A7R	Fluoride, total	mg/L	03/05/21 - 04/22/24	15	0	CI around mean	0.193	4.0	MCL/HBL	No Exceedance
G03	UA	A7D	Fluoride, total	mg/L	03/05/21 - 07/23/24	16	0	CI around mean	0.194	4.0	MCL/HBL	No Exceedance
G03	UA	A7DR	Fluoride, total	mg/L	03/05/21 - 10/21/24	17	5	CI around mean	0.195	4.0	MCL/HBL	No Exceedance
G03	UA	A6D	Lead, total	mg/L	03/05/21 - 09/26/23	12	33	CI around geomean	0.00113	0.015	MCL/HBL	No Exceedance
G03	UA	A6DR	Lead, total	mg/L	03/05/21 - 10/23/23	13	38	CI around geomean	0.00110	0.015	MCL/HBL	No Exceedance
G03	UA	A7	Lead, total	mg/L	03/05/21 - 01/30/24	14	35	CI around geomean	0.00118	0.015	MCL/HBL	No Exceedance
G03	UA	A7R	Lead, total	mg/L	03/05/21 - 04/22/24	15	33	CI around geomean	0.00122	0.015	MCL/HBL	No Exceedance
G03	UA	A7D	Lead, total	mg/L	03/05/21 - 07/23/24	16	31	CI around geomean	0.00128	0.015	MCL/HBL	No Exceedance
G03	UA	A7DR	Lead, total	mg/L	03/05/21 - 10/21/24	17	29	CI around geomean	0.00134	0.015	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G03	UA	A6D	Lithium, total	mg/L	03/05/21 - 09/26/23	12	66	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G03	UA	A6DR	Lithium, total	mg/L	03/05/21 - 10/23/23	13	69	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G03	UA	A7	Lithium, total	mg/L	03/05/21 - 01/30/24	14	71	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G03	UA	A7R	Lithium, total	mg/L	03/05/21 - 04/22/24	15	73	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G03	UA	A7D	Lithium, total	mg/L	03/05/21 - 07/23/24	16	68	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G03	UA	A7DR	Lithium, total	mg/L	03/05/21 - 10/21/24	17	64	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G03	UA	A6D	Mercury, total	mg/L	03/05/21 - 09/26/23	12	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G03	UA	A6DR	Mercury, total	mg/L	03/05/21 - 10/23/23	13	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G03	UA	A7	Mercury, total	mg/L	03/05/21 - 01/30/24	14	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G03	UA	A7R	Mercury, total	mg/L	03/05/21 - 04/22/24	15	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G03	UA	A7D	Mercury, total	mg/L	03/05/21 - 07/23/24	16	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G03	UA	A7DR	Mercury, total	mg/L	03/05/21 - 10/21/24	17	94	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G03	UA	A6D	Molybdenum, total	mg/L	03/05/21 - 09/26/23	12	83	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G03	UA	A6DR	Molybdenum, total	mg/L	03/05/21 - 10/23/23	13	84	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G03	UA	A7	Molybdenum, total	mg/L	03/05/21 - 01/30/24	14	85	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G03	UA	A7R	Molybdenum, total	mg/L	03/05/21 - 04/22/24	15	86	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G03	UA	A7D	Molybdenum, total	mg/L	03/05/21 - 07/23/24	16	87	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G03	UA	A7DR	Molybdenum, total	mg/L	03/05/21 - 10/21/24	17	88	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G03	UA	A6D	Radium 226 + Radium 228, total	pCi/L	03/05/21 - 09/26/23	12	0	CI around mean	0.307	5	MCL/HBL	No Exceedance
G03	UA	A6DR	Radium 226 + Radium 228, total	pCi/L	03/05/21 - 10/23/23	13	0	CI around mean	0.387	5	MCL/HBL	No Exceedance
G03	UA	A7	Radium 226 + Radium 228, total	pCi/L	03/05/21 - 01/30/24	14	0	CI around mean	0.368	5	MCL/HBL	No Exceedance
G03	UA	A7R	Radium 226 + Radium 228, total	pCi/L	03/05/21 - 04/22/24	15	0	CI around mean	0.446	5	MCL/HBL	No Exceedance
G03	UA	A7D	Radium 226 + Radium 228, total	pCi/L	03/05/21 - 07/23/24	16	0	CI around mean	0.502	5	MCL/HBL	No Exceedance
G03	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	03/05/21 - 10/21/24	17	0	CI around mean	0.488	5	MCL/HBL	No Exceedance
G03	UA	A6D	Selenium, total	mg/L	03/05/21 - 09/26/23	12	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G03	UA	A6DR	Selenium, total	mg/L	03/05/21 - 10/23/23	13	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G03	UA	A7	Selenium, total	mg/L	03/05/21 - 01/30/24	14	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G03	UA	A7R	Selenium, total	mg/L	03/05/21 - 04/22/24	15	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G03	UA	A7D	Selenium, total	mg/L	03/05/21 - 07/23/24	16	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G03	UA	A7DR	Selenium, total	mg/L	03/05/21 - 10/21/24	17	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G03	UA	A6D	Thallium, total	mg/L	03/05/21 - 09/26/23	12	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G03	UA	A6DR	Thallium, total	mg/L	03/05/21 - 10/23/23	13	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G03	UA	A7	Thallium, total	mg/L	03/05/21 - 01/30/24	14	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G03	UA	A7R	Thallium, total	mg/L	03/05/21 - 04/22/24	15	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G03	UA	A7D	Thallium, total	mg/L	03/05/21 - 07/23/24	16	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G03	UA	A7DR	Thallium, total	mg/L	03/05/21 - 10/21/24	17	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G05	UA	A6D	Antimony, total	mg/L	03/04/21 - 09/27/23	12	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G05	UA	A6DR	Antimony, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G05	UA	A7	Antimony, total	mg/L	03/04/21 - 01/31/24	14	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G05	UA	A7R	Antimony, total	mg/L	03/04/21 - 04/23/24	15	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G05	UA	A7D	Antimony, total	mg/L	03/04/21 - 07/24/24	16	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G05	UA	A7DR	Antimony, total	mg/L	03/04/21 - 10/22/24	17	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G05	UA	A6D	Arsenic, total	mg/L	03/04/21 - 09/27/23	12	91	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G05	UA	A6DR	Arsenic, total	mg/L	03/04/21 - 10/24/23	13	92	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G05	UA	A7	Arsenic, total	mg/L	03/04/21 - 01/31/24	14	85	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G05	UA	A7R	Arsenic, total	mg/L	03/04/21 - 04/23/24	15	86	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G05	UA	A7D	Arsenic, total	mg/L	03/04/21 - 07/24/24	16	81	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G05	UA	A7DR	Arsenic, total	mg/L	03/04/21 - 10/22/24	17	76	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G05	UA	A6D	Barium, total	mg/L	03/04/21 - 09/27/23	12	0	CB around linear reg	0.159	2.0	MCL/HBL	No Exceedance
G05	UA	A6DR	Barium, total	mg/L	03/04/21 - 10/24/23	13	0	CB around linear reg	0.162	2.0	MCL/HBL	No Exceedance
G05	UA	A7	Barium, total	mg/L	03/04/21 - 01/31/24	14	0	CB around T-S line	0.156	2.0	MCL/HBL	No Exceedance
G05	UA	A7R	Barium, total	mg/L	03/04/21 - 04/23/24	15	0	CB around linear reg	0.179	2.0	MCL/HBL	No Exceedance
G05	UA	A7D	Barium, total	mg/L	03/04/21 - 07/24/24	16	0	CB around linear reg	0.181	2.0	MCL/HBL	No Exceedance
G05	UA	A7DR	Barium, total	mg/L	03/04/21 - 10/22/24	17	0	CB around linear reg	0.190	2.0	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G05	UA	A6D	Beryllium, total	mg/L	03/04/21 - 09/27/23	12	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G05	UA	A6DR	Beryllium, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G05	UA	A7	Beryllium, total	mg/L	03/04/21 - 01/31/24	14	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G05	UA	A7R	Beryllium, total	mg/L	03/04/21 - 04/23/24	15	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G05	UA	A7D	Beryllium, total	mg/L	03/04/21 - 07/24/24	16	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G05	UA	A7DR	Beryllium, total	mg/L	03/04/21 - 10/22/24	17	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G05	UA	A6D	Cadmium, total	mg/L	03/04/21 - 09/27/23	12	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G05	UA	A6DR	Cadmium, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G05	UA	A7	Cadmium, total	mg/L	03/04/21 - 01/31/24	14	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G05	UA	A7R	Cadmium, total	mg/L	03/04/21 - 04/23/24	15	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G05	UA	A7D	Cadmium, total	mg/L	03/04/21 - 07/24/24	16	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G05	UA	A7DR	Cadmium, total	mg/L	03/04/21 - 10/22/24	17	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G05	UA	A6D	Chromium, total	mg/L	03/04/21 - 09/27/23	12	75	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G05	UA	A6DR	Chromium, total	mg/L	03/04/21 - 10/24/23	13	76	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G05	UA	A7	Chromium, total	mg/L	03/04/21 - 01/31/24	14	71	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G05	UA	A7R	Chromium, total	mg/L	03/04/21 - 04/23/24	15	66	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G05	UA	A7D	Chromium, total	mg/L	03/04/21 - 07/24/24	16	62	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G05	UA	A7DR	Chromium, total	mg/L	03/04/21 - 10/22/24	17	64	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G05	UA	A6D	Cobalt, total	mg/L	03/04/21 - 09/27/23	12	0	CI around mean	0.00601	0.0366	Background	No Exceedance
G05	UA	A6DR	Cobalt, total	mg/L	03/04/21 - 10/24/23	13	0	CB around linear reg	0.000824	0.0366	Background	No Exceedance
G05	UA	A7	Cobalt, total	mg/L	03/04/21 - 01/31/24	14	0	CB around linear reg	0.000397	0.0366	Background	No Exceedance
G05	UA	A7R	Cobalt, total	mg/L	03/04/21 - 04/23/24	15	0	CB around linear reg	0.0000824	0.0366	Background	No Exceedance
G05	UA	A7D	Cobalt, total	mg/L	03/04/21 - 07/24/24	16	0	CB around linear reg	-0.000290	0.0366	Background	No Exceedance
G05	UA	A7DR	Cobalt, total	mg/L	03/04/21 - 10/22/24	17	0	CB around linear reg	-0.000759	0.0366	Background	No Exceedance
G05	UA	A6D	Fluoride, total	mg/L	03/04/21 - 09/27/23	12	0	CI around mean	0.314	4.0	MCL/HBL	No Exceedance
G05	UA	A6DR	Fluoride, total	mg/L	03/04/21 - 10/24/23	13	0	CB around linear reg	0.358	4.0	MCL/HBL	No Exceedance
G05	UA	A7	Fluoride, total	mg/L	03/04/21 - 01/31/24	14	0	CB around linear reg	0.348	4.0	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
 2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 JOPPA POWER PLANT
 EAST ASH POND
 JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G05	UA	A7R	Fluoride, total	mg/L	03/04/21 - 04/23/24	15	0	CB around linear reg	0.353	4.0	MCL/HBL	No Exceedance
G05	UA	A7D	Fluoride, total	mg/L	03/04/21 - 07/24/24	16	0	CB around linear reg	0.362	4.0	MCL/HBL	No Exceedance
G05	UA	A7DR	Fluoride, total	mg/L	03/04/21 - 10/22/24	17	5	CI around mean	0.318	4.0	MCL/HBL	No Exceedance
G05	UA	A6D	Lead, total	mg/L	03/04/21 - 09/27/23	12	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G05	UA	A6DR	Lead, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G05	UA	A7	Lead, total	mg/L	03/04/21 - 01/31/24	14	92	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G05	UA	A7R	Lead, total	mg/L	03/04/21 - 04/23/24	15	93	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G05	UA	A7D	Lead, total	mg/L	03/04/21 - 07/24/24	16	93	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G05	UA	A7DR	Lead, total	mg/L	03/04/21 - 10/22/24	17	94	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G05	UA	A6D	Lithium, total	mg/L	03/04/21 - 09/27/23	12	75	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G05	UA	A6DR	Lithium, total	mg/L	03/04/21 - 10/24/23	13	76	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G05	UA	A7	Lithium, total	mg/L	03/04/21 - 01/31/24	14	71	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G05	UA	A7R	Lithium, total	mg/L	03/04/21 - 04/23/24	15	73	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G05	UA	A7D	Lithium, total	mg/L	03/04/21 - 07/24/24	16	75	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G05	UA	A7DR	Lithium, total	mg/L	03/04/21 - 10/22/24	17	70	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G05	UA	A6D	Mercury, total	mg/L	03/04/21 - 09/27/23	12	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G05	UA	A6DR	Mercury, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G05	UA	A7	Mercury, total	mg/L	03/04/21 - 01/31/24	14	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G05	UA	A7R	Mercury, total	mg/L	03/04/21 - 04/23/24	15	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G05	UA	A7D	Mercury, total	mg/L	03/04/21 - 07/24/24	16	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G05	UA	A7DR	Mercury, total	mg/L	03/04/21 - 10/22/24	17	94	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G05	UA	A6D	Molybdenum, total	mg/L	03/04/21 - 09/27/23	12	8	CI around mean	0.00408	0.1	MCL/HBL	No Exceedance
G05	UA	A6DR	Molybdenum, total	mg/L	03/04/21 - 10/24/23	13	7	CI around mean	0.00381	0.1	MCL/HBL	No Exceedance
G05	UA	A7	Molybdenum, total	mg/L	03/04/21 - 01/31/24	14	7	CI around mean	0.00391	0.1	MCL/HBL	No Exceedance
G05	UA	A7R	Molybdenum, total	mg/L	03/04/21 - 04/23/24	15	6	CI around mean	0.00391	0.1	MCL/HBL	No Exceedance
G05	UA	A7D	Molybdenum, total	mg/L	03/04/21 - 07/24/24	16	6	CI around mean	0.00394	0.1	MCL/HBL	No Exceedance
G05	UA	A7DR	Molybdenum, total	mg/L	03/04/21 - 10/22/24	17	5	CI around mean	0.00402	0.1	MCL/HBL	No Exceedance

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JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G05	UA	A6D	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 09/27/23	12	0	CI around geomean	0.344	5	MCL/HBL	No Exceedance
G05	UA	A6DR	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 10/24/23	13	0	CI around geomean	0.372	5	MCL/HBL	No Exceedance
G05	UA	A7	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 01/31/24	14	0	CI around geomean	0.413	5	MCL/HBL	No Exceedance
G05	UA	A7R	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 04/23/24	15	0	CI around geomean	0.454	5	MCL/HBL	No Exceedance
G05	UA	A7D	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 07/24/24	16	0	CI around geomean	0.479	5	MCL/HBL	No Exceedance
G05	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 10/22/24	17	0	CI around geomean	0.510	5	MCL/HBL	No Exceedance
G05	UA	A6D	Selenium, total	mg/L	03/04/21 - 09/27/23	12	25	CB around linear reg	-0.000179	0.05	MCL/HBL	No Exceedance
G05	UA	A6DR	Selenium, total	mg/L	03/04/21 - 10/24/23	13	30	CB around linear reg	0.0000389	0.05	MCL/HBL	No Exceedance
G05	UA	A7	Selenium, total	mg/L	03/04/21 - 01/31/24	14	28	CB around linear reg	0.000114	0.05	MCL/HBL	No Exceedance
G05	UA	A7R	Selenium, total	mg/L	03/04/21 - 04/23/24	15	26	CB around linear reg	0.000257	0.05	MCL/HBL	No Exceedance
G05	UA	A7D	Selenium, total	mg/L	03/04/21 - 07/24/24	16	25	CI around mean	0.00110	0.05	MCL/HBL	No Exceedance
G05	UA	A7DR	Selenium, total	mg/L	03/04/21 - 10/22/24	17	29	CI around geomean	0.00109	0.05	MCL/HBL	No Exceedance
G05	UA	A6D	Thallium, total	mg/L	03/04/21 - 09/27/23	12	91	CI around median	0.00200	0.002	MCL/HBL	No Exceedance
G05	UA	A6DR	Thallium, total	mg/L	03/04/21 - 10/24/23	13	92	CI around median	0.00200	0.002	MCL/HBL	No Exceedance
G05	UA	A7	Thallium, total	mg/L	03/04/21 - 01/31/24	14	92	CI around median	0.00200	0.002	MCL/HBL	No Exceedance
G05	UA	A7R	Thallium, total	mg/L	03/04/21 - 04/23/24	15	93	CI around median	0.00200	0.002	MCL/HBL	No Exceedance
G05	UA	A7D	Thallium, total	mg/L	03/04/21 - 07/24/24	16	93	CI around median	0.00200	0.002	MCL/HBL	No Exceedance
G05	UA	A7DR	Thallium, total	mg/L	03/04/21 - 10/22/24	17	94	CI around median	0.00200	0.002	MCL/HBL	No Exceedance
G06	UA	A6D	Antimony, total	mg/L	03/04/21 - 09/27/23	12	91	CI around median	0.00100	0.006	MCL/HBL	No Exceedance
G06	UA	A6DR	Antimony, total	mg/L	03/04/21 - 10/24/23	13	92	CI around median	0.00100	0.006	MCL/HBL	No Exceedance
G06	UA	A7	Antimony, total	mg/L	03/04/21 - 01/30/24	14	92	CI around median	0.00100	0.006	MCL/HBL	No Exceedance
G06	UA	A7R	Antimony, total	mg/L	03/04/21 - 04/23/24	15	93	CI around median	0.00100	0.006	MCL/HBL	No Exceedance
G06	UA	A7D	Antimony, total	mg/L	03/04/21 - 07/24/24	16	87	CI around median	0.00100	0.006	MCL/HBL	No Exceedance
G06	UA	A7DR	Antimony, total	mg/L	03/04/21 - 10/22/24	17	88	CI around median	0.00100	0.006	MCL/HBL	No Exceedance
G06	UA	A6D	Arsenic, total	mg/L	03/04/21 - 09/27/23	12	58	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G06	UA	A6DR	Arsenic, total	mg/L	03/04/21 - 10/24/23	13	61	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G06	UA	A7	Arsenic, total	mg/L	03/04/21 - 01/30/24	14	57	CI around median	0.00100	0.010	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G06	UA	A7R	Arsenic, total	mg/L	03/04/21 - 04/23/24	15	53	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G06	UA	A7D	Arsenic, total	mg/L	03/04/21 - 07/24/24	16	50	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G06	UA	A7DR	Arsenic, total	mg/L	03/04/21 - 10/22/24	17	47	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G06	UA	A6D	Barium, total	mg/L	03/04/21 - 09/27/23	12	0	CI around mean	0.0269	2.0	MCL/HBL	No Exceedance
G06	UA	A6DR	Barium, total	mg/L	03/04/21 - 10/24/23	13	0	CI around mean	0.0277	2.0	MCL/HBL	No Exceedance
G06	UA	A7	Barium, total	mg/L	03/04/21 - 01/30/24	14	0	CI around median	0.0257	2.0	MCL/HBL	No Exceedance
G06	UA	A7R	Barium, total	mg/L	03/04/21 - 04/23/24	15	0	CI around median	0.0257	2.0	MCL/HBL	No Exceedance
G06	UA	A7D	Barium, total	mg/L	03/04/21 - 07/24/24	16	0	CI around median	0.0272	2.0	MCL/HBL	No Exceedance
G06	UA	A7DR	Barium, total	mg/L	03/04/21 - 10/22/24	17	0	CI around median	0.0272	2.0	MCL/HBL	No Exceedance
G06	UA	A6D	Beryllium, total	mg/L	03/04/21 - 09/27/23	12	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G06	UA	A6DR	Beryllium, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G06	UA	A7	Beryllium, total	mg/L	03/04/21 - 01/30/24	14	92	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G06	UA	A7R	Beryllium, total	mg/L	03/04/21 - 04/23/24	15	93	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G06	UA	A7D	Beryllium, total	mg/L	03/04/21 - 07/24/24	16	93	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G06	UA	A7DR	Beryllium, total	mg/L	03/04/21 - 10/22/24	17	94	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G06	UA	A6D	Cadmium, total	mg/L	03/04/21 - 09/27/23	12	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G06	UA	A6DR	Cadmium, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G06	UA	A7	Cadmium, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G06	UA	A7R	Cadmium, total	mg/L	03/04/21 - 04/23/24	15	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G06	UA	A7D	Cadmium, total	mg/L	03/04/21 - 07/24/24	16	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G06	UA	A7DR	Cadmium, total	mg/L	03/04/21 - 10/22/24	17	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G06	UA	A6D	Chromium, total	mg/L	03/04/21 - 09/27/23	12	33	CI around mean	0.00143	0.1	MCL/HBL	No Exceedance
G06	UA	A6DR	Chromium, total	mg/L	03/04/21 - 10/24/23	13	30	CI around mean	0.00148	0.1	MCL/HBL	No Exceedance
G06	UA	A7	Chromium, total	mg/L	03/04/21 - 01/30/24	14	28	CI around geomean	0.00161	0.1	MCL/HBL	No Exceedance
G06	UA	A7R	Chromium, total	mg/L	03/04/21 - 04/23/24	15	26	CI around geomean	0.00164	0.1	MCL/HBL	No Exceedance
G06	UA	A7D	Chromium, total	mg/L	03/04/21 - 07/24/24	16	25	CI around geomean	0.00178	0.1	MCL/HBL	No Exceedance
G06	UA	A7DR	Chromium, total	mg/L	03/04/21 - 10/22/24	17	23	CI around geomean	0.00193	0.1	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G06	UA	A6D	Cobalt, total	mg/L	03/04/21 - 09/27/23	12	58	CI around median	0.00100	0.0366	Background	No Exceedance
G06	UA	A6DR	Cobalt, total	mg/L	03/04/21 - 10/24/23	13	61	CI around median	0.00100	0.0366	Background	No Exceedance
G06	UA	A7	Cobalt, total	mg/L	03/04/21 - 01/30/24	14	57	CI around median	0.00100	0.0366	Background	No Exceedance
G06	UA	A7R	Cobalt, total	mg/L	03/04/21 - 04/23/24	15	53	CI around median	0.00100	0.0366	Background	No Exceedance
G06	UA	A7D	Cobalt, total	mg/L	03/04/21 - 07/24/24	16	50	CI around median	0.00100	0.0366	Background	No Exceedance
G06	UA	A7DR	Cobalt, total	mg/L	03/04/21 - 10/22/24	17	47	CI around median	0.00100	0.0366	Background	No Exceedance
G06	UA	A6D	Fluoride, total	mg/L	03/04/21 - 09/27/23	12	0	CI around mean	0.253	4.0	MCL/HBL	No Exceedance
G06	UA	A6DR	Fluoride, total	mg/L	03/04/21 - 10/24/23	13	0	CI around mean	0.256	4.0	MCL/HBL	No Exceedance
G06	UA	A7	Fluoride, total	mg/L	03/04/21 - 01/30/24	14	0	CI around mean	0.252	4.0	MCL/HBL	No Exceedance
G06	UA	A7R	Fluoride, total	mg/L	03/04/21 - 04/23/24	15	0	CI around mean	0.253	4.0	MCL/HBL	No Exceedance
G06	UA	A7D	Fluoride, total	mg/L	03/04/21 - 07/24/24	16	0	CI around mean	0.254	4.0	MCL/HBL	No Exceedance
G06	UA	A7DR	Fluoride, total	mg/L	03/04/21 - 10/22/24	17	5	CI around mean	0.254	4.0	MCL/HBL	No Exceedance
G06	UA	A6D	Lead, total	mg/L	03/04/21 - 09/27/23	12	83	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G06	UA	A6DR	Lead, total	mg/L	03/04/21 - 10/24/23	13	84	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G06	UA	A7	Lead, total	mg/L	03/04/21 - 01/30/24	14	78	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G06	UA	A7R	Lead, total	mg/L	03/04/21 - 04/23/24	15	73	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G06	UA	A7D	Lead, total	mg/L	03/04/21 - 07/24/24	16	68	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G06	UA	A7DR	Lead, total	mg/L	03/04/21 - 10/22/24	17	64	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G06	UA	A6D	Lithium, total	mg/L	03/04/21 - 09/27/23	12	25	CI around median	0.00310	0.04	MCL/HBL	No Exceedance
G06	UA	A6DR	Lithium, total	mg/L	03/04/21 - 10/24/23	13	23	CI around median	0.00350	0.04	MCL/HBL	No Exceedance
G06	UA	A7	Lithium, total	mg/L	03/04/21 - 01/30/24	14	21	CI around median	0.00350	0.04	MCL/HBL	No Exceedance
G06	UA	A7R	Lithium, total	mg/L	03/04/21 - 04/23/24	15	20	CI around median	0.00350	0.04	MCL/HBL	No Exceedance
G06	UA	A7D	Lithium, total	mg/L	03/04/21 - 07/24/24	16	18	CI around median	0.00350	0.04	MCL/HBL	No Exceedance
G06	UA	A7DR	Lithium, total	mg/L	03/04/21 - 10/22/24	17	17	CI around median	0.00350	0.04	MCL/HBL	No Exceedance
G06	UA	A6D	Mercury, total	mg/L	03/04/21 - 09/27/23	12	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G06	UA	A6DR	Mercury, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G06	UA	A7	Mercury, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G06	UA	A7R	Mercury, total	mg/L	03/04/21 - 04/23/24	15	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G06	UA	A7D	Mercury, total	mg/L	03/04/21 - 07/24/24	16	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G06	UA	A7DR	Mercury, total	mg/L	03/04/21 - 10/22/24	17	94	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G06	UA	A6D	Molybdenum, total	mg/L	03/04/21 - 09/27/23	12	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G06	UA	A6DR	Molybdenum, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G06	UA	A7	Molybdenum, total	mg/L	03/04/21 - 01/30/24	14	92	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G06	UA	A7R	Molybdenum, total	mg/L	03/04/21 - 04/23/24	15	93	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G06	UA	A7D	Molybdenum, total	mg/L	03/04/21 - 07/24/24	16	93	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G06	UA	A7DR	Molybdenum, total	mg/L	03/04/21 - 10/22/24	17	94	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G06	UA	A6D	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 09/27/23	12	0	CI around geomean	0.480	5	MCL/HBL	No Exceedance
G06	UA	A6DR	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 10/24/23	13	0	CI around geomean	0.518	5	MCL/HBL	No Exceedance
G06	UA	A7	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 01/30/24	14	0	CB around linear reg	1.19	5	MCL/HBL	No Exceedance
G06	UA	A7R	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 04/23/24	15	0	CB around linear reg	1.16	5	MCL/HBL	No Exceedance
G06	UA	A7D	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 07/24/24	16	0	CB around linear reg	0.945	5	MCL/HBL	No Exceedance
G06	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 10/22/24	17	0	CB around T-S line	1.04	5	MCL/HBL	No Exceedance
G06	UA	A6D	Selenium, total	mg/L	03/04/21 - 09/27/23	12	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G06	UA	A6DR	Selenium, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G06	UA	A7	Selenium, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G06	UA	A7R	Selenium, total	mg/L	03/04/21 - 04/23/24	15	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G06	UA	A7D	Selenium, total	mg/L	03/04/21 - 07/24/24	16	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G06	UA	A7DR	Selenium, total	mg/L	03/04/21 - 10/22/24	17	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G06	UA	A6D	Thallium, total	mg/L	03/04/21 - 09/27/23	12	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G06	UA	A6DR	Thallium, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G06	UA	A7	Thallium, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G06	UA	A7R	Thallium, total	mg/L	03/04/21 - 04/23/24	15	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G06	UA	A7D	Thallium, total	mg/L	03/04/21 - 07/24/24	16	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G06	UA	A7DR	Thallium, total	mg/L	03/04/21 - 10/22/24	17	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G07	UA	A6D	Antimony, total	mg/L	03/04/21 - 09/27/23	12	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G07	UA	A6DR	Antimony, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G07	UA	A7	Antimony, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G07	UA	A7R	Antimony, total	mg/L	03/04/21 - 04/23/24	15	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G07	UA	A7D	Antimony, total	mg/L	03/04/21 - 07/24/24	16	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G07	UA	A7DR	Antimony, total	mg/L	03/04/21 - 10/22/24	17	94	CI around median	0.00100	0.006	MCL/HBL	No Exceedance
G07	UA	A6D	Arsenic, total	mg/L	03/04/21 - 09/27/23	12	75	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G07	UA	A6DR	Arsenic, total	mg/L	03/04/21 - 10/24/23	13	76	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G07	UA	A7	Arsenic, total	mg/L	03/04/21 - 01/30/24	14	71	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G07	UA	A7R	Arsenic, total	mg/L	03/04/21 - 04/23/24	15	66	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G07	UA	A7D	Arsenic, total	mg/L	03/04/21 - 07/24/24	16	68	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G07	UA	A7DR	Arsenic, total	mg/L	03/04/21 - 10/22/24	17	64	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G07	UA	A6D	Barium, total	mg/L	03/04/21 - 09/27/23	12	0	CI around geomean	0.0415	2.0	MCL/HBL	No Exceedance
G07	UA	A6DR	Barium, total	mg/L	03/04/21 - 10/24/23	13	0	CI around geomean	0.0415	2.0	MCL/HBL	No Exceedance
G07	UA	A7	Barium, total	mg/L	03/04/21 - 01/30/24	14	0	CI around geomean	0.0443	2.0	MCL/HBL	No Exceedance
G07	UA	A7R	Barium, total	mg/L	03/04/21 - 04/23/24	15	0	CI around geomean	0.0471	2.0	MCL/HBL	No Exceedance
G07	UA	A7D	Barium, total	mg/L	03/04/21 - 07/24/24	16	0	CI around geomean	0.0477	2.0	MCL/HBL	No Exceedance
G07	UA	A7DR	Barium, total	mg/L	03/04/21 - 10/22/24	17	0	CI around geomean	0.0500	2.0	MCL/HBL	No Exceedance
G07	UA	A6D	Beryllium, total	mg/L	03/04/21 - 09/27/23	12	91	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G07	UA	A6DR	Beryllium, total	mg/L	03/04/21 - 10/24/23	13	92	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G07	UA	A7	Beryllium, total	mg/L	03/04/21 - 01/30/24	14	85	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G07	UA	A7R	Beryllium, total	mg/L	03/04/21 - 04/23/24	15	80	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G07	UA	A7D	Beryllium, total	mg/L	03/04/21 - 07/24/24	16	81	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G07	UA	A7DR	Beryllium, total	mg/L	03/04/21 - 10/22/24	17	82	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G07	UA	A6D	Cadmium, total	mg/L	03/04/21 - 09/27/23	12	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G07	UA	A6DR	Cadmium, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G07	UA	A7	Cadmium, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G07	UA	A7R	Cadmium, total	mg/L	03/04/21 - 04/23/24	15	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G07	UA	A7D	Cadmium, total	mg/L	03/04/21 - 07/24/24	16	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G07	UA	A7DR	Cadmium, total	mg/L	03/04/21 - 10/22/24	17	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G07	UA	A6D	Chromium, total	mg/L	03/04/21 - 09/27/23	12	33	CI around geomean	0.00196	0.1	MCL/HBL	No Exceedance
G07	UA	A6DR	Chromium, total	mg/L	03/04/21 - 10/24/23	13	38	CI around geomean	0.00187	0.1	MCL/HBL	No Exceedance
G07	UA	A7	Chromium, total	mg/L	03/04/21 - 01/30/24	14	35	CI around geomean	0.00213	0.1	MCL/HBL	No Exceedance
G07	UA	A7R	Chromium, total	mg/L	03/04/21 - 04/23/24	15	33	CI around geomean	0.00240	0.1	MCL/HBL	No Exceedance
G07	UA	A7D	Chromium, total	mg/L	03/04/21 - 07/24/24	16	31	CI around geomean	0.00256	0.1	MCL/HBL	No Exceedance
G07	UA	A7DR	Chromium, total	mg/L	03/04/21 - 10/22/24	17	29	CI around geomean	0.00284	0.1	MCL/HBL	No Exceedance
G07	UA	A6D	Cobalt, total	mg/L	03/04/21 - 09/27/23	12	0	CI around mean	0.00136	0.0366	Background	No Exceedance
G07	UA	A6DR	Cobalt, total	mg/L	03/04/21 - 10/24/23	13	7	CI around mean	0.00123	0.0366	Background	No Exceedance
G07	UA	A7	Cobalt, total	mg/L	03/04/21 - 01/30/24	14	7	CI around mean	0.00147	0.0366	Background	No Exceedance
G07	UA	A7R	Cobalt, total	mg/L	03/04/21 - 04/23/24	15	6	CI around mean	0.00170	0.0366	Background	No Exceedance
G07	UA	A7D	Cobalt, total	mg/L	03/04/21 - 07/24/24	16	6	CI around mean	0.00165	0.0366	Background	No Exceedance
G07	UA	A7DR	Cobalt, total	mg/L	03/04/21 - 10/22/24	17	5	CI around mean	0.00176	0.0366	Background	No Exceedance
G07	UA	A6D	Fluoride, total	mg/L	03/04/21 - 09/27/23	12	0	CI around median	0.350	4.0	MCL/HBL	No Exceedance
G07	UA	A6DR	Fluoride, total	mg/L	03/04/21 - 10/24/23	13	0	CI around median	0.400	4.0	MCL/HBL	No Exceedance
G07	UA	A7	Fluoride, total	mg/L	03/04/21 - 01/30/24	14	0	CI around median	0.380	4.0	MCL/HBL	No Exceedance
G07	UA	A7R	Fluoride, total	mg/L	03/04/21 - 04/23/24	15	0	CI around median	0.380	4.0	MCL/HBL	No Exceedance
G07	UA	A7D	Fluoride, total	mg/L	03/04/21 - 07/24/24	16	0	CI around median	0.400	4.0	MCL/HBL	No Exceedance
G07	UA	A7DR	Fluoride, total	mg/L	03/04/21 - 10/22/24	17	5	CI around median	0.380	4.0	MCL/HBL	No Exceedance
G07	UA	A6D	Lead, total	mg/L	03/04/21 - 09/27/23	12	75	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G07	UA	A6DR	Lead, total	mg/L	03/04/21 - 10/24/23	13	76	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G07	UA	A7	Lead, total	mg/L	03/04/21 - 01/30/24	14	71	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G07	UA	A7R	Lead, total	mg/L	03/04/21 - 04/23/24	15	66	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G07	UA	A7D	Lead, total	mg/L	03/04/21 - 07/24/24	16	62	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G07	UA	A7DR	Lead, total	mg/L	03/04/21 - 10/22/24	17	58	CI around median	0.00100	0.015	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G07	UA	A6D	Lithium, total	mg/L	03/04/21 - 09/27/23	12	66	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G07	UA	A6DR	Lithium, total	mg/L	03/04/21 - 10/24/23	13	61	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G07	UA	A7	Lithium, total	mg/L	03/04/21 - 01/30/24	14	57	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G07	UA	A7R	Lithium, total	mg/L	03/04/21 - 04/23/24	15	53	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G07	UA	A7D	Lithium, total	mg/L	03/04/21 - 07/24/24	16	50	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G07	UA	A7DR	Lithium, total	mg/L	03/04/21 - 10/22/24	17	47	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G07	UA	A6D	Mercury, total	mg/L	03/04/21 - 09/27/23	12	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G07	UA	A6DR	Mercury, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G07	UA	A7	Mercury, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G07	UA	A7R	Mercury, total	mg/L	03/04/21 - 04/23/24	15	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G07	UA	A7D	Mercury, total	mg/L	03/04/21 - 07/24/24	16	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G07	UA	A7DR	Mercury, total	mg/L	03/04/21 - 10/22/24	17	94	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G07	UA	A6D	Molybdenum, total	mg/L	03/04/21 - 09/27/23	12	91	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G07	UA	A6DR	Molybdenum, total	mg/L	03/04/21 - 10/24/23	13	92	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G07	UA	A7	Molybdenum, total	mg/L	03/04/21 - 01/30/24	14	85	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G07	UA	A7R	Molybdenum, total	mg/L	03/04/21 - 04/23/24	15	80	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G07	UA	A7D	Molybdenum, total	mg/L	03/04/21 - 07/24/24	16	81	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G07	UA	A7DR	Molybdenum, total	mg/L	03/04/21 - 10/22/24	17	82	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G07	UA	A6D	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 09/27/23	12	0	CB around linear reg	1.09	5	MCL/HBL	No Exceedance
G07	UA	A6DR	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 10/24/23	13	0	CB around linear reg	0.744	5	MCL/HBL	No Exceedance
G07	UA	A7	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 01/30/24	14	0	CB around linear reg	1.15	5	MCL/HBL	No Exceedance
G07	UA	A7R	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 04/23/24	15	0	CB around linear reg	1.48	5	MCL/HBL	No Exceedance
G07	UA	A7D	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 07/24/24	16	0	CB around linear reg	0.961	5	MCL/HBL	No Exceedance
G07	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 10/22/24	17	0	CB around linear reg	0.834	5	MCL/HBL	No Exceedance
G07	UA	A6D	Selenium, total	mg/L	03/04/21 - 09/27/23	12	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G07	UA	A6DR	Selenium, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G07	UA	A7	Selenium, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G07	UA	A7R	Selenium, total	mg/L	03/04/21 - 04/23/24	15	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G07	UA	A7D	Selenium, total	mg/L	03/04/21 - 07/24/24	16	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G07	UA	A7DR	Selenium, total	mg/L	03/04/21 - 10/22/24	17	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G07	UA	A6D	Thallium, total	mg/L	03/04/21 - 09/27/23	12	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G07	UA	A6DR	Thallium, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G07	UA	A7	Thallium, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G07	UA	A7R	Thallium, total	mg/L	03/04/21 - 04/23/24	15	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G07	UA	A7D	Thallium, total	mg/L	03/04/21 - 07/24/24	16	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G07	UA	A7DR	Thallium, total	mg/L	03/04/21 - 10/22/24	17	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G08	UA	A6D	Antimony, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G08	UA	A6DR	Antimony, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G08	UA	A7	Antimony, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G08	UA	A7R	Antimony, total	mg/L	03/04/21 - 04/23/24	15	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G08	UA	A7D	Antimony, total	mg/L	03/04/21 - 07/24/24	16	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G08	UA	A7DR	Antimony, total	mg/L	03/04/21 - 10/22/24	17	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G08	UA	A6D	Arsenic, total	mg/L	03/04/21 - 09/26/23	12	8	CI around mean	0.00595	0.010	MCL/HBL	No Exceedance
G08	UA	A6DR	Arsenic, total	mg/L	03/04/21 - 10/24/23	13	7	CI around mean	0.00609	0.010	MCL/HBL	No Exceedance
G08	UA	A7	Arsenic, total	mg/L	03/04/21 - 01/30/24	14	7	CI around mean	0.00621	0.010	MCL/HBL	No Exceedance
G08	UA	A7R	Arsenic, total	mg/L	03/04/21 - 04/23/24	15	6	CI around mean	0.00599	0.010	MCL/HBL	No Exceedance
G08	UA	A7D	Arsenic, total	mg/L	03/04/21 - 07/24/24	16	6	CI around mean	0.00602	0.010	MCL/HBL	No Exceedance
G08	UA	A7DR	Arsenic, total	mg/L	03/04/21 - 10/22/24	17	5	CI around mean	0.00636	0.010	MCL/HBL	No Exceedance
G08	UA	A6D	Barium, total	mg/L	03/04/21 - 09/26/23	12	0	CB around T-S line	-0.398	2.0	MCL/HBL	No Exceedance
G08	UA	A6DR	Barium, total	mg/L	03/04/21 - 10/24/23	13	0	CI around mean	0.0486	2.0	MCL/HBL	No Exceedance
G08	UA	A7	Barium, total	mg/L	03/04/21 - 01/30/24	14	0	CI around mean	0.0525	2.0	MCL/HBL	No Exceedance
G08	UA	A7R	Barium, total	mg/L	03/04/21 - 04/23/24	15	0	CI around mean	0.0523	2.0	MCL/HBL	No Exceedance
G08	UA	A7D	Barium, total	mg/L	03/04/21 - 07/24/24	16	0	CI around mean	0.0510	2.0	MCL/HBL	No Exceedance
G08	UA	A7DR	Barium, total	mg/L	03/04/21 - 10/22/24	17	0	CI around mean	0.0543	2.0	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G08	UA	A6D	Beryllium, total	mg/L	03/04/21 - 09/26/23	12	91	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G08	UA	A6DR	Beryllium, total	mg/L	03/04/21 - 10/24/23	13	92	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G08	UA	A7	Beryllium, total	mg/L	03/04/21 - 01/30/24	14	92	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G08	UA	A7R	Beryllium, total	mg/L	03/04/21 - 04/23/24	15	93	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G08	UA	A7D	Beryllium, total	mg/L	03/04/21 - 07/24/24	16	93	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G08	UA	A7DR	Beryllium, total	mg/L	03/04/21 - 10/22/24	17	94	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G08	UA	A6D	Cadmium, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G08	UA	A6DR	Cadmium, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G08	UA	A7	Cadmium, total	mg/L	03/04/21 - 01/30/24	14	92	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
G08	UA	A7R	Cadmium, total	mg/L	03/04/21 - 04/23/24	15	93	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
G08	UA	A7D	Cadmium, total	mg/L	03/04/21 - 07/24/24	16	93	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
G08	UA	A7DR	Cadmium, total	mg/L	03/04/21 - 10/22/24	17	94	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
G08	UA	A6D	Chromium, total	mg/L	03/04/21 - 09/26/23	12	16	CI around geomean	0.00162	0.1	MCL/HBL	No Exceedance
G08	UA	A6DR	Chromium, total	mg/L	03/04/21 - 10/24/23	13	15	CI around geomean	0.00174	0.1	MCL/HBL	No Exceedance
G08	UA	A7	Chromium, total	mg/L	03/04/21 - 01/30/24	14	14	CI around geomean	0.00171	0.1	MCL/HBL	No Exceedance
G08	UA	A7R	Chromium, total	mg/L	03/04/21 - 04/23/24	15	13	CI around geomean	0.00181	0.1	MCL/HBL	No Exceedance
G08	UA	A7D	Chromium, total	mg/L	03/04/21 - 07/24/24	16	12	CI around geomean	0.00186	0.1	MCL/HBL	No Exceedance
G08	UA	A7DR	Chromium, total	mg/L	03/04/21 - 10/22/24	17	11	CI around geomean	0.00198	0.1	MCL/HBL	No Exceedance
G08	UA	A6D	Cobalt, total	mg/L	03/04/21 - 09/26/23	12	8	CI around geomean	0.00319	0.0366	Background	No Exceedance
G08	UA	A6DR	Cobalt, total	mg/L	03/04/21 - 10/24/23	13	7	CI around mean	0.00325	0.0366	Background	No Exceedance
G08	UA	A7	Cobalt, total	mg/L	03/04/21 - 01/30/24	14	7	CI around mean	0.00349	0.0366	Background	No Exceedance
G08	UA	A7R	Cobalt, total	mg/L	03/04/21 - 04/23/24	15	6	CI around geomean	0.00354	0.0366	Background	No Exceedance
G08	UA	A7D	Cobalt, total	mg/L	03/04/21 - 07/24/24	16	6	CI around geomean	0.00352	0.0366	Background	No Exceedance
G08	UA	A7DR	Cobalt, total	mg/L	03/04/21 - 10/22/24	17	5	CI around geomean	0.00369	0.0366	Background	No Exceedance
G08	UA	A6D	Fluoride, total	mg/L	03/04/21 - 09/26/23	12	0	CB around linear reg	0.202	4.0	MCL/HBL	No Exceedance
G08	UA	A6DR	Fluoride, total	mg/L	03/04/21 - 10/24/23	13	0	CB around linear reg	0.218	4.0	MCL/HBL	No Exceedance
G08	UA	A7	Fluoride, total	mg/L	03/04/21 - 01/30/24	14	0	CB around linear reg	0.215	4.0	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G08	UA	A7R	Fluoride, total	mg/L	03/04/21 - 04/23/24	15	0	CB around linear reg	0.218	4.0	MCL/HBL	No Exceedance
G08	UA	A7D	Fluoride, total	mg/L	03/04/21 - 07/24/24	16	0	CB around linear reg	0.222	4.0	MCL/HBL	No Exceedance
G08	UA	A7DR	Fluoride, total	mg/L	03/04/21 - 10/22/24	17	5	CB around linear reg	0.217	4.0	MCL/HBL	No Exceedance
G08	UA	A6D	Lead, total	mg/L	03/04/21 - 09/26/23	12	83	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G08	UA	A6DR	Lead, total	mg/L	03/04/21 - 10/24/23	13	76	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G08	UA	A7	Lead, total	mg/L	03/04/21 - 01/30/24	14	71	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G08	UA	A7R	Lead, total	mg/L	03/04/21 - 04/23/24	15	73	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G08	UA	A7D	Lead, total	mg/L	03/04/21 - 07/24/24	16	75	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G08	UA	A7DR	Lead, total	mg/L	03/04/21 - 10/22/24	17	70	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G08	UA	A6D	Lithium, total	mg/L	03/04/21 - 09/26/23	12	91	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G08	UA	A6DR	Lithium, total	mg/L	03/04/21 - 10/24/23	13	84	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G08	UA	A7	Lithium, total	mg/L	03/04/21 - 01/30/24	14	78	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G08	UA	A7R	Lithium, total	mg/L	03/04/21 - 04/23/24	15	73	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G08	UA	A7D	Lithium, total	mg/L	03/04/21 - 07/24/24	16	75	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G08	UA	A7DR	Lithium, total	mg/L	03/04/21 - 10/22/24	17	70	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G08	UA	A6D	Mercury, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G08	UA	A6DR	Mercury, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G08	UA	A7	Mercury, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G08	UA	A7R	Mercury, total	mg/L	03/04/21 - 04/23/24	15	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G08	UA	A7D	Mercury, total	mg/L	03/04/21 - 07/24/24	16	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G08	UA	A7DR	Mercury, total	mg/L	03/04/21 - 10/22/24	17	94	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G08	UA	A6D	Molybdenum, total	mg/L	03/04/21 - 09/26/23	12	16	CI around median	0.00170	0.1	MCL/HBL	No Exceedance
G08	UA	A6DR	Molybdenum, total	mg/L	03/04/21 - 10/24/23	13	15	CI around median	0.00170	0.1	MCL/HBL	No Exceedance
G08	UA	A7	Molybdenum, total	mg/L	03/04/21 - 01/30/24	14	14	CI around geomean	0.00193	0.1	MCL/HBL	No Exceedance
G08	UA	A7R	Molybdenum, total	mg/L	03/04/21 - 04/23/24	15	20	CI around median	0.00170	0.1	MCL/HBL	No Exceedance
G08	UA	A7D	Molybdenum, total	mg/L	03/04/21 - 07/24/24	16	18	CI around median	0.00170	0.1	MCL/HBL	No Exceedance
G08	UA	A7DR	Molybdenum, total	mg/L	03/04/21 - 10/22/24	17	17	CI around median	0.00170	0.1	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G08	UA	A6D	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 09/26/23	12	0	CI around mean	0.372	5	MCL/HBL	No Exceedance
G08	UA	A6DR	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 10/24/23	13	0	CI around geomean	0.284	5	MCL/HBL	No Exceedance
G08	UA	A7	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 01/30/24	14	0	CB around linear reg	0.795	5	MCL/HBL	No Exceedance
G08	UA	A7R	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 04/23/24	15	0	CB around linear reg	0.806	5	MCL/HBL	No Exceedance
G08	UA	A7D	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 07/24/24	16	0	CI around geomean	0.369	5	MCL/HBL	No Exceedance
G08	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 10/22/24	17	0	CB around T-S line	0.646	5	MCL/HBL	No Exceedance
G08	UA	A6D	Selenium, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G08	UA	A6DR	Selenium, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G08	UA	A7	Selenium, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G08	UA	A7R	Selenium, total	mg/L	03/04/21 - 04/23/24	15	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G08	UA	A7D	Selenium, total	mg/L	03/04/21 - 07/24/24	16	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G08	UA	A7DR	Selenium, total	mg/L	03/04/21 - 10/22/24	17	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G08	UA	A6D	Thallium, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G08	UA	A6DR	Thallium, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G08	UA	A7	Thallium, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G08	UA	A7R	Thallium, total	mg/L	03/04/21 - 04/23/24	15	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G08	UA	A7D	Thallium, total	mg/L	03/04/21 - 07/24/24	16	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G08	UA	A7DR	Thallium, total	mg/L	03/04/21 - 10/22/24	17	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G09	UA	A6D	Antimony, total	mg/L	03/04/21 - 09/26/23	12	91	CI around median	0.00100	0.006	MCL/HBL	No Exceedance
G09	UA	A6DR	Antimony, total	mg/L	03/04/21 - 10/25/23	13	92	CI around median	0.00100	0.006	MCL/HBL	No Exceedance
G09	UA	A7	Antimony, total	mg/L	03/04/21 - 02/01/24	14	92	CI around median	0.00100	0.006	MCL/HBL	No Exceedance
G09	UA	A7R	Antimony, total	mg/L	03/04/21 - 04/23/24	15	93	CI around median	0.00100	0.006	MCL/HBL	No Exceedance
G09	UA	A7D	Antimony, total	mg/L	03/04/21 - 07/23/24	16	87	CI around median	0.00100	0.006	MCL/HBL	No Exceedance
G09	UA	A7DR	Antimony, total	mg/L	03/04/21 - 10/22/24	17	88	CI around median	0.00100	0.006	MCL/HBL	No Exceedance
G09	UA	A6D	Arsenic, total	mg/L	03/04/21 - 09/26/23	12	16	CI around mean	0.00235	0.010	MCL/HBL	No Exceedance
G09	UA	A6DR	Arsenic, total	mg/L	03/04/21 - 10/25/23	13	15	CI around mean	0.00238	0.010	MCL/HBL	No Exceedance
G09	UA	A7	Arsenic, total	mg/L	03/04/21 - 02/01/24	14	14	CI around geomean	0.00197	0.010	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G09	UA	A7R	Arsenic, total	mg/L	03/04/21 - 04/23/24	15	13	CI around geomean	0.00212	0.010	MCL/HBL	No Exceedance
G09	UA	A7D	Arsenic, total	mg/L	03/04/21 - 07/23/24	16	12	CI around geomean	0.00224	0.010	MCL/HBL	No Exceedance
G09	UA	A7DR	Arsenic, total	mg/L	03/04/21 - 10/22/24	17	11	CI around geomean	0.00228	0.010	MCL/HBL	No Exceedance
G09	UA	A6D	Barium, total	mg/L	03/04/21 - 09/26/23	12	0	CB around linear reg	-0.00515	2.0	MCL/HBL	No Exceedance
G09	UA	A6DR	Barium, total	mg/L	03/04/21 - 10/25/23	13	0	CB around linear reg	0.000628	2.0	MCL/HBL	No Exceedance
G09	UA	A7	Barium, total	mg/L	03/04/21 - 02/01/24	14	0	CI around mean	0.0370	2.0	MCL/HBL	No Exceedance
G09	UA	A7R	Barium, total	mg/L	03/04/21 - 04/23/24	15	0	CI around mean	0.0389	2.0	MCL/HBL	No Exceedance
G09	UA	A7D	Barium, total	mg/L	03/04/21 - 07/23/24	16	0	CI around mean	0.0405	2.0	MCL/HBL	No Exceedance
G09	UA	A7DR	Barium, total	mg/L	03/04/21 - 10/22/24	17	0	CI around mean	0.0400	2.0	MCL/HBL	No Exceedance
G09	UA	A6D	Beryllium, total	mg/L	03/04/21 - 09/26/23	12	75	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G09	UA	A6DR	Beryllium, total	mg/L	03/04/21 - 10/25/23	13	76	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G09	UA	A7	Beryllium, total	mg/L	03/04/21 - 02/01/24	14	71	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G09	UA	A7R	Beryllium, total	mg/L	03/04/21 - 04/23/24	15	66	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G09	UA	A7D	Beryllium, total	mg/L	03/04/21 - 07/23/24	16	62	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G09	UA	A7DR	Beryllium, total	mg/L	03/04/21 - 10/22/24	17	64	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G09	UA	A6D	Cadmium, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G09	UA	A6DR	Cadmium, total	mg/L	03/04/21 - 10/25/23	13	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G09	UA	A7	Cadmium, total	mg/L	03/04/21 - 02/01/24	14	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G09	UA	A7R	Cadmium, total	mg/L	03/04/21 - 04/23/24	15	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G09	UA	A7D	Cadmium, total	mg/L	03/04/21 - 07/23/24	16	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G09	UA	A7DR	Cadmium, total	mg/L	03/04/21 - 10/22/24	17	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G09	UA	A6D	Chromium, total	mg/L	03/04/21 - 09/26/23	12	25	CI around mean	0.00178	0.1	MCL/HBL	No Exceedance
G09	UA	A6DR	Chromium, total	mg/L	03/04/21 - 10/25/23	13	23	CI around geomean	0.00154	0.1	MCL/HBL	No Exceedance
G09	UA	A7	Chromium, total	mg/L	03/04/21 - 02/01/24	14	21	CI around geomean	0.00162	0.1	MCL/HBL	No Exceedance
G09	UA	A7R	Chromium, total	mg/L	03/04/21 - 04/23/24	15	20	CI around geomean	0.00176	0.1	MCL/HBL	No Exceedance
G09	UA	A7D	Chromium, total	mg/L	03/04/21 - 07/23/24	16	18	CI around geomean	0.00191	0.1	MCL/HBL	No Exceedance
G09	UA	A7DR	Chromium, total	mg/L	03/04/21 - 10/22/24	17	17	CI around geomean	0.00199	0.1	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G09	UA	A6D	Cobalt, total	mg/L	03/04/21 - 09/26/23	12	0	CB around linear reg	-0.00188	0.0366	Background	No Exceedance
G09	UA	A6DR	Cobalt, total	mg/L	03/04/21 - 10/25/23	13	0	CB around linear reg	-0.00147	0.0366	Background	No Exceedance
G09	UA	A7	Cobalt, total	mg/L	03/04/21 - 02/01/24	14	0	CB around linear reg	-0.000461	0.0366	Background	No Exceedance
G09	UA	A7R	Cobalt, total	mg/L	03/04/21 - 04/23/24	15	0	CB around linear reg	-0.000200	0.0366	Background	No Exceedance
G09	UA	A7D	Cobalt, total	mg/L	03/04/21 - 07/23/24	16	0	CB around linear reg	-0.000167	0.0366	Background	No Exceedance
G09	UA	A7DR	Cobalt, total	mg/L	03/04/21 - 10/22/24	17	0	CB around linear reg	-0.000450	0.0366	Background	No Exceedance
G09	UA	A6D	Fluoride, total	mg/L	03/04/21 - 09/26/23	12	0	CI around mean	0.279	4.0	MCL/HBL	No Exceedance
G09	UA	A6DR	Fluoride, total	mg/L	03/04/21 - 10/25/23	13	0	CI around mean	0.282	4.0	MCL/HBL	No Exceedance
G09	UA	A7	Fluoride, total	mg/L	03/04/21 - 02/01/24	14	0	CI around mean	0.278	4.0	MCL/HBL	No Exceedance
G09	UA	A7R	Fluoride, total	mg/L	03/04/21 - 04/23/24	15	0	CI around mean	0.277	4.0	MCL/HBL	No Exceedance
G09	UA	A7D	Fluoride, total	mg/L	03/04/21 - 07/23/24	16	0	CI around mean	0.280	4.0	MCL/HBL	No Exceedance
G09	UA	A7DR	Fluoride, total	mg/L	03/04/21 - 10/22/24	17	5	CI around mean	0.277	4.0	MCL/HBL	No Exceedance
G09	UA	A6D	Lead, total	mg/L	03/04/21 - 09/26/23	12	66	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G09	UA	A6DR	Lead, total	mg/L	03/04/21 - 10/25/23	13	69	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G09	UA	A7	Lead, total	mg/L	03/04/21 - 02/01/24	14	64	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G09	UA	A7R	Lead, total	mg/L	03/04/21 - 04/23/24	15	60	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G09	UA	A7D	Lead, total	mg/L	03/04/21 - 07/23/24	16	56	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G09	UA	A7DR	Lead, total	mg/L	03/04/21 - 10/22/24	17	58	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G09	UA	A6D	Lithium, total	mg/L	03/04/21 - 09/26/23	12	16	CI around median	0.00340	0.04	MCL/HBL	No Exceedance
G09	UA	A6DR	Lithium, total	mg/L	03/04/21 - 10/25/23	13	15	CI around median	0.00340	0.04	MCL/HBL	No Exceedance
G09	UA	A7	Lithium, total	mg/L	03/04/21 - 02/01/24	14	14	CI around median	0.00340	0.04	MCL/HBL	No Exceedance
G09	UA	A7R	Lithium, total	mg/L	03/04/21 - 04/23/24	15	13	CI around median	0.00340	0.04	MCL/HBL	No Exceedance
G09	UA	A7D	Lithium, total	mg/L	03/04/21 - 07/23/24	16	12	CI around median	0.00340	0.04	MCL/HBL	No Exceedance
G09	UA	A7DR	Lithium, total	mg/L	03/04/21 - 10/22/24	17	11	CI around median	0.00340	0.04	MCL/HBL	No Exceedance
G09	UA	A6D	Mercury, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G09	UA	A6DR	Mercury, total	mg/L	03/04/21 - 10/25/23	13	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G09	UA	A7	Mercury, total	mg/L	03/04/21 - 02/01/24	14	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G09	UA	A7R	Mercury, total	mg/L	03/04/21 - 04/23/24	15	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G09	UA	A7D	Mercury, total	mg/L	03/04/21 - 07/23/24	16	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G09	UA	A7DR	Mercury, total	mg/L	03/04/21 - 10/22/24	17	94	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G09	UA	A6D	Molybdenum, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G09	UA	A6DR	Molybdenum, total	mg/L	03/04/21 - 10/25/23	13	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G09	UA	A7	Molybdenum, total	mg/L	03/04/21 - 02/01/24	14	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G09	UA	A7R	Molybdenum, total	mg/L	03/04/21 - 04/23/24	15	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G09	UA	A7D	Molybdenum, total	mg/L	03/04/21 - 07/23/24	16	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G09	UA	A7DR	Molybdenum, total	mg/L	03/04/21 - 10/22/24	17	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G09	UA	A6D	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 09/26/23	12	0	CI around geomean	0.249	5	MCL/HBL	No Exceedance
G09	UA	A6DR	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 10/25/23	13	0	CI around mean	0.257	5	MCL/HBL	No Exceedance
G09	UA	A7	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 02/01/24	14	0	CI around mean	0.312	5	MCL/HBL	No Exceedance
G09	UA	A7R	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 04/23/24	15	0	CI around mean	0.359	5	MCL/HBL	No Exceedance
G09	UA	A7D	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 07/23/24	16	0	CI around geomean	0.339	5	MCL/HBL	No Exceedance
G09	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 10/22/24	17	0	CI around geomean	0.334	5	MCL/HBL	No Exceedance
G09	UA	A6D	Selenium, total	mg/L	03/04/21 - 09/26/23	12	91	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
G09	UA	A6DR	Selenium, total	mg/L	03/04/21 - 10/25/23	13	92	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
G09	UA	A7	Selenium, total	mg/L	03/04/21 - 02/01/24	14	92	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
G09	UA	A7R	Selenium, total	mg/L	03/04/21 - 04/23/24	15	93	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
G09	UA	A7D	Selenium, total	mg/L	03/04/21 - 07/23/24	16	93	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
G09	UA	A7DR	Selenium, total	mg/L	03/04/21 - 10/22/24	17	94	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
G09	UA	A6D	Thallium, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G09	UA	A6DR	Thallium, total	mg/L	03/04/21 - 10/25/23	13	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G09	UA	A7	Thallium, total	mg/L	03/04/21 - 02/01/24	14	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G09	UA	A7R	Thallium, total	mg/L	03/04/21 - 04/23/24	15	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G09	UA	A7D	Thallium, total	mg/L	03/04/21 - 07/23/24	16	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G09	UA	A7DR	Thallium, total	mg/L	03/04/21 - 10/22/24	17	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G10	UA	A6D	Antimony, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G10	UA	A6DR	Antimony, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G10	UA	A7	Antimony, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G10	UA	A7R	Antimony, total	mg/L	03/04/21 - 04/22/24	15	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G10	UA	A7D	Antimony, total	mg/L	03/04/21 - 07/24/24	16	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G10	UA	A7DR	Antimony, total	mg/L	03/04/21 - 10/21/24	17	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G10	UA	A6D	Arsenic, total	mg/L	03/04/21 - 09/26/23	12	33	CI around geomean	0.00111	0.010	MCL/HBL	No Exceedance
G10	UA	A6DR	Arsenic, total	mg/L	03/04/21 - 10/24/23	13	30	CI around geomean	0.00118	0.010	MCL/HBL	No Exceedance
G10	UA	A7	Arsenic, total	mg/L	03/04/21 - 01/30/24	14	28	CI around geomean	0.00116	0.010	MCL/HBL	No Exceedance
G10	UA	A7R	Arsenic, total	mg/L	03/04/21 - 04/22/24	15	26	CB around linear reg	0.00480	0.010	MCL/HBL	No Exceedance
G10	UA	A7D	Arsenic, total	mg/L	03/04/21 - 07/24/24	16	25	CB around linear reg	0.00438	0.010	MCL/HBL	No Exceedance
G10	UA	A7DR	Arsenic, total	mg/L	03/04/21 - 10/21/24	17	23	CB around T-S line	0.00232	0.010	MCL/HBL	No Exceedance
G10	UA	A6D	Barium, total	mg/L	03/04/21 - 09/26/23	12	0	CI around mean	0.0390	2.0	MCL/HBL	No Exceedance
G10	UA	A6DR	Barium, total	mg/L	03/04/21 - 10/24/23	13	0	CI around mean	0.0388	2.0	MCL/HBL	No Exceedance
G10	UA	A7	Barium, total	mg/L	03/04/21 - 01/30/24	14	0	CI around geomean	0.0381	2.0	MCL/HBL	No Exceedance
G10	UA	A7R	Barium, total	mg/L	03/04/21 - 04/22/24	15	0	CI around geomean	0.0390	2.0	MCL/HBL	No Exceedance
G10	UA	A7D	Barium, total	mg/L	03/04/21 - 07/24/24	16	0	CI around median	0.0376	2.0	MCL/HBL	No Exceedance
G10	UA	A7DR	Barium, total	mg/L	03/04/21 - 10/21/24	17	0	CI around median	0.0376	2.0	MCL/HBL	No Exceedance
G10	UA	A6D	Beryllium, total	mg/L	03/04/21 - 09/26/23	12	91	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G10	UA	A6DR	Beryllium, total	mg/L	03/04/21 - 10/24/23	13	92	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G10	UA	A7	Beryllium, total	mg/L	03/04/21 - 01/30/24	14	85	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G10	UA	A7R	Beryllium, total	mg/L	03/04/21 - 04/22/24	15	86	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G10	UA	A7D	Beryllium, total	mg/L	03/04/21 - 07/24/24	16	87	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G10	UA	A7DR	Beryllium, total	mg/L	03/04/21 - 10/21/24	17	82	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G10	UA	A6D	Cadmium, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G10	UA	A6DR	Cadmium, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G10	UA	A7	Cadmium, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G10	UA	A7R	Cadmium, total	mg/L	03/04/21 - 04/22/24	15	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G10	UA	A7D	Cadmium, total	mg/L	03/04/21 - 07/24/24	16	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G10	UA	A7DR	Cadmium, total	mg/L	03/04/21 - 10/21/24	17	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G10	UA	A6D	Chromium, total	mg/L	03/04/21 - 09/26/23	12	33	CI around mean	0.00130	0.1	MCL/HBL	No Exceedance
G10	UA	A6DR	Chromium, total	mg/L	03/04/21 - 10/24/23	13	30	CI around geomean	0.00156	0.1	MCL/HBL	No Exceedance
G10	UA	A7	Chromium, total	mg/L	03/04/21 - 01/30/24	14	28	CI around geomean	0.00169	0.1	MCL/HBL	No Exceedance
G10	UA	A7R	Chromium, total	mg/L	03/04/21 - 04/22/24	15	26	CI around geomean	0.00185	0.1	MCL/HBL	No Exceedance
G10	UA	A7D	Chromium, total	mg/L	03/04/21 - 07/24/24	16	25	CI around geomean	0.00189	0.1	MCL/HBL	No Exceedance
G10	UA	A7DR	Chromium, total	mg/L	03/04/21 - 10/21/24	17	23	CI around geomean	0.00204	0.1	MCL/HBL	No Exceedance
G10	UA	A6D	Cobalt, total	mg/L	03/04/21 - 09/26/23	12	0	CB around linear reg	-0.00202	0.0366	Background	No Exceedance
G10	UA	A6DR	Cobalt, total	mg/L	03/04/21 - 10/24/23	13	0	CB around linear reg	-0.00140	0.0366	Background	No Exceedance
G10	UA	A7	Cobalt, total	mg/L	03/04/21 - 01/30/24	14	0	CB around linear reg	-0.000645	0.0366	Background	No Exceedance
G10	UA	A7R	Cobalt, total	mg/L	03/04/21 - 04/22/24	15	0	CB around linear reg	-0.000578	0.0366	Background	No Exceedance
G10	UA	A7D	Cobalt, total	mg/L	03/04/21 - 07/24/24	16	0	CB around linear reg	-0.000843	0.0366	Background	No Exceedance
G10	UA	A7DR	Cobalt, total	mg/L	03/04/21 - 10/21/24	17	0	CB around linear reg	-0.000356	0.0366	Background	No Exceedance
G10	UA	A6D	Fluoride, total	mg/L	03/04/21 - 09/26/23	12	0	CI around mean	0.272	4.0	MCL/HBL	No Exceedance
G10	UA	A6DR	Fluoride, total	mg/L	03/04/21 - 10/24/23	13	0	CI around mean	0.276	4.0	MCL/HBL	No Exceedance
G10	UA	A7	Fluoride, total	mg/L	03/04/21 - 01/30/24	14	0	CI around median	0.280	4.0	MCL/HBL	No Exceedance
G10	UA	A7R	Fluoride, total	mg/L	03/04/21 - 04/22/24	15	0	CI around median	0.280	4.0	MCL/HBL	No Exceedance
G10	UA	A7D	Fluoride, total	mg/L	03/04/21 - 07/24/24	16	0	CI around median	0.280	4.0	MCL/HBL	No Exceedance
G10	UA	A7DR	Fluoride, total	mg/L	03/04/21 - 10/21/24	17	5	CI around median	0.280	4.0	MCL/HBL	No Exceedance
G10	UA	A6D	Lead, total	mg/L	03/04/21 - 09/26/23	12	83	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G10	UA	A6DR	Lead, total	mg/L	03/04/21 - 10/24/23	13	84	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G10	UA	A7	Lead, total	mg/L	03/04/21 - 01/30/24	14	78	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G10	UA	A7R	Lead, total	mg/L	03/04/21 - 04/22/24	15	73	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G10	UA	A7D	Lead, total	mg/L	03/04/21 - 07/24/24	16	75	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G10	UA	A7DR	Lead, total	mg/L	03/04/21 - 10/21/24	17	70	CI around median	0.00100	0.015	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G10	UA	A6D	Lithium, total	mg/L	03/04/21 - 09/26/23	12	41	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G10	UA	A6DR	Lithium, total	mg/L	03/04/21 - 10/24/23	13	38	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G10	UA	A7	Lithium, total	mg/L	03/04/21 - 01/30/24	14	35	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G10	UA	A7R	Lithium, total	mg/L	03/04/21 - 04/22/24	15	33	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G10	UA	A7D	Lithium, total	mg/L	03/04/21 - 07/24/24	16	31	CI around median	0.00310	0.04	MCL/HBL	No Exceedance
G10	UA	A7DR	Lithium, total	mg/L	03/04/21 - 10/21/24	17	29	CB around T-S line	0.00291	0.04	MCL/HBL	No Exceedance
G10	UA	A6D	Mercury, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G10	UA	A6DR	Mercury, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G10	UA	A7	Mercury, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G10	UA	A7R	Mercury, total	mg/L	03/04/21 - 04/22/24	15	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G10	UA	A7D	Mercury, total	mg/L	03/04/21 - 07/24/24	16	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G10	UA	A7DR	Mercury, total	mg/L	03/04/21 - 10/21/24	17	94	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G10	UA	A6D	Molybdenum, total	mg/L	03/04/21 - 09/26/23	12	58	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G10	UA	A6DR	Molybdenum, total	mg/L	03/04/21 - 10/24/23	13	61	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G10	UA	A7	Molybdenum, total	mg/L	03/04/21 - 01/30/24	14	57	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G10	UA	A7R	Molybdenum, total	mg/L	03/04/21 - 04/22/24	15	53	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G10	UA	A7D	Molybdenum, total	mg/L	03/04/21 - 07/24/24	16	50	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G10	UA	A7DR	Molybdenum, total	mg/L	03/04/21 - 10/21/24	17	47	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G10	UA	A6D	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 09/26/23	12	0	CI around mean	0.503	5	MCL/HBL	No Exceedance
G10	UA	A6DR	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 10/24/23	13	0	CI around mean	0.561	5	MCL/HBL	No Exceedance
G10	UA	A7	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 01/30/24	14	0	CI around mean	0.538	5	MCL/HBL	No Exceedance
G10	UA	A7R	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 04/22/24	15	0	CI around mean	0.601	5	MCL/HBL	No Exceedance
G10	UA	A7D	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 07/24/24	16	0	CI around mean	0.637	5	MCL/HBL	No Exceedance
G10	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 10/21/24	17	0	CB around T-S line	0.968	5	MCL/HBL	No Exceedance
G10	UA	A6D	Selenium, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G10	UA	A6DR	Selenium, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G10	UA	A7	Selenium, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G10	UA	A7R	Selenium, total	mg/L	03/04/21 - 04/22/24	15	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G10	UA	A7D	Selenium, total	mg/L	03/04/21 - 07/24/24	16	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G10	UA	A7DR	Selenium, total	mg/L	03/04/21 - 10/21/24	17	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G10	UA	A6D	Thallium, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G10	UA	A6DR	Thallium, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G10	UA	A7	Thallium, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G10	UA	A7R	Thallium, total	mg/L	03/04/21 - 04/22/24	15	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G10	UA	A7D	Thallium, total	mg/L	03/04/21 - 07/24/24	16	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G10	UA	A7DR	Thallium, total	mg/L	03/04/21 - 10/21/24	17	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G11	UA	A6D	Antimony, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G11	UA	A6DR	Antimony, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G11	UA	A7	Antimony, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G11	UA	A7R	Antimony, total	mg/L	03/04/21 - 04/22/24	15	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G11	UA	A7D	Antimony, total	mg/L	03/04/21 - 07/23/24	16	93	CI around median	0.00100	0.006	MCL/HBL	No Exceedance
G11	UA	A7DR	Antimony, total	mg/L	03/04/21 - 10/21/24	17	94	CI around median	0.00100	0.006	MCL/HBL	No Exceedance
G11	UA	A6D	Arsenic, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance
G11	UA	A6DR	Arsenic, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance
G11	UA	A7	Arsenic, total	mg/L	03/04/21 - 01/30/24	14	92	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G11	UA	A7R	Arsenic, total	mg/L	03/04/21 - 04/22/24	15	93	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G11	UA	A7D	Arsenic, total	mg/L	03/04/21 - 07/23/24	16	93	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G11	UA	A7DR	Arsenic, total	mg/L	03/04/21 - 10/21/24	17	94	CI around median	0.00100	0.010	MCL/HBL	No Exceedance
G11	UA	A6D	Barium, total	mg/L	03/04/21 - 09/26/23	12	0	CI around geomean	0.0129	2.0	MCL/HBL	No Exceedance
G11	UA	A6DR	Barium, total	mg/L	03/04/21 - 10/24/23	13	0	CI around geomean	0.0135	2.0	MCL/HBL	No Exceedance
G11	UA	A7	Barium, total	mg/L	03/04/21 - 01/30/24	14	0	CI around geomean	0.0142	2.0	MCL/HBL	No Exceedance
G11	UA	A7R	Barium, total	mg/L	03/04/21 - 04/22/24	15	0	CI around geomean	0.0147	2.0	MCL/HBL	No Exceedance
G11	UA	A7D	Barium, total	mg/L	03/04/21 - 07/23/24	16	0	CI around geomean	0.0150	2.0	MCL/HBL	No Exceedance
G11	UA	A7DR	Barium, total	mg/L	03/04/21 - 10/21/24	17	0	CI around geomean	0.0157	2.0	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G11	UA	A6D	Beryllium, total	mg/L	03/04/21 - 09/26/23	12	91	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G11	UA	A6DR	Beryllium, total	mg/L	03/04/21 - 10/24/23	13	92	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G11	UA	A7	Beryllium, total	mg/L	03/04/21 - 01/30/24	14	92	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G11	UA	A7R	Beryllium, total	mg/L	03/04/21 - 04/22/24	15	93	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G11	UA	A7D	Beryllium, total	mg/L	03/04/21 - 07/23/24	16	93	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G11	UA	A7DR	Beryllium, total	mg/L	03/04/21 - 10/21/24	17	94	CI around median	0.00100	0.004	MCL/HBL	No Exceedance
G11	UA	A6D	Cadmium, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G11	UA	A6DR	Cadmium, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G11	UA	A7	Cadmium, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G11	UA	A7R	Cadmium, total	mg/L	03/04/21 - 04/22/24	15	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G11	UA	A7D	Cadmium, total	mg/L	03/04/21 - 07/23/24	16	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G11	UA	A7DR	Cadmium, total	mg/L	03/04/21 - 10/21/24	17	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G11	UA	A6D	Chromium, total	mg/L	03/04/21 - 09/26/23	12	83	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G11	UA	A6DR	Chromium, total	mg/L	03/04/21 - 10/24/23	13	84	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G11	UA	A7	Chromium, total	mg/L	03/04/21 - 01/30/24	14	78	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G11	UA	A7R	Chromium, total	mg/L	03/04/21 - 04/22/24	15	80	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G11	UA	A7D	Chromium, total	mg/L	03/04/21 - 07/23/24	16	81	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G11	UA	A7DR	Chromium, total	mg/L	03/04/21 - 10/21/24	17	76	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G11	UA	A6D	Cobalt, total	mg/L	03/04/21 - 09/26/23	12	33	CI around geomean	0.000945	0.0366	Background	No Exceedance
G11	UA	A6DR	Cobalt, total	mg/L	03/04/21 - 10/24/23	13	38	CI around geomean	0.000934	0.0366	Background	No Exceedance
G11	UA	A7	Cobalt, total	mg/L	03/04/21 - 01/30/24	14	35	CI around geomean	0.00101	0.0366	Background	No Exceedance
G11	UA	A7R	Cobalt, total	mg/L	03/04/21 - 04/22/24	15	40	CI around geomean	0.000991	0.0366	Background	No Exceedance
G11	UA	A7D	Cobalt, total	mg/L	03/04/21 - 07/23/24	16	43	CI around median	0.00100	0.0366	Background	No Exceedance
G11	UA	A7DR	Cobalt, total	mg/L	03/04/21 - 10/21/24	17	41	CI around median	0.00100	0.0366	Background	No Exceedance
G11	UA	A6D	Fluoride, total	mg/L	03/04/21 - 09/26/23	12	0	CI around mean	0.172	4.0	MCL/HBL	No Exceedance
G11	UA	A6DR	Fluoride, total	mg/L	03/04/21 - 10/24/23	13	0	CI around mean	0.167	4.0	MCL/HBL	No Exceedance
G11	UA	A7	Fluoride, total	mg/L	03/04/21 - 01/30/24	14	0	CI around mean	0.168	4.0	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G11	UA	A7R	Fluoride, total	mg/L	03/04/21 - 04/22/24	15	0	CI around mean	0.170	4.0	MCL/HBL	No Exceedance
G11	UA	A7D	Fluoride, total	mg/L	03/04/21 - 07/23/24	16	0	CI around mean	0.172	4.0	MCL/HBL	No Exceedance
G11	UA	A7DR	Fluoride, total	mg/L	03/04/21 - 10/21/24	17	5	CI around mean	0.174	4.0	MCL/HBL	No Exceedance
G11	UA	A6D	Lead, total	mg/L	03/04/21 - 09/26/23	12	91	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G11	UA	A6DR	Lead, total	mg/L	03/04/21 - 10/24/23	13	92	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G11	UA	A7	Lead, total	mg/L	03/04/21 - 01/30/24	14	85	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G11	UA	A7R	Lead, total	mg/L	03/04/21 - 04/22/24	15	86	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G11	UA	A7D	Lead, total	mg/L	03/04/21 - 07/23/24	16	87	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G11	UA	A7DR	Lead, total	mg/L	03/04/21 - 10/21/24	17	88	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G11	UA	A6D	Lithium, total	mg/L	03/04/21 - 09/26/23	12	16	CI around median	0.00350	0.04	MCL/HBL	No Exceedance
G11	UA	A6DR	Lithium, total	mg/L	03/04/21 - 10/24/23	13	15	CI around median	0.00350	0.04	MCL/HBL	No Exceedance
G11	UA	A7	Lithium, total	mg/L	03/04/21 - 01/30/24	14	14	CI around median	0.00350	0.04	MCL/HBL	No Exceedance
G11	UA	A7R	Lithium, total	mg/L	03/04/21 - 04/22/24	15	13	CI around median	0.00350	0.04	MCL/HBL	No Exceedance
G11	UA	A7D	Lithium, total	mg/L	03/04/21 - 07/23/24	16	12	CI around median	0.00360	0.04	MCL/HBL	No Exceedance
G11	UA	A7DR	Lithium, total	mg/L	03/04/21 - 10/21/24	17	11	CI around median	0.00360	0.04	MCL/HBL	No Exceedance
G11	UA	A6D	Mercury, total	mg/L	03/04/21 - 09/26/23	12	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G11	UA	A6DR	Mercury, total	mg/L	03/04/21 - 10/24/23	13	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G11	UA	A7	Mercury, total	mg/L	03/04/21 - 01/30/24	14	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G11	UA	A7R	Mercury, total	mg/L	03/04/21 - 04/22/24	15	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G11	UA	A7D	Mercury, total	mg/L	03/04/21 - 07/23/24	16	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G11	UA	A7DR	Mercury, total	mg/L	03/04/21 - 10/21/24	17	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G11	UA	A6D	Molybdenum, total	mg/L	03/04/21 - 09/26/23	12	91	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G11	UA	A6DR	Molybdenum, total	mg/L	03/04/21 - 10/24/23	13	92	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G11	UA	A7	Molybdenum, total	mg/L	03/04/21 - 01/30/24	14	92	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G11	UA	A7R	Molybdenum, total	mg/L	03/04/21 - 04/22/24	15	93	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G11	UA	A7D	Molybdenum, total	mg/L	03/04/21 - 07/23/24	16	93	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G11	UA	A7DR	Molybdenum, total	mg/L	03/04/21 - 10/21/24	17	94	CI around median	0.00150	0.1	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G11	UA	A6D	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 09/26/23	12	0	CI around geomean	0.199	5	MCL/HBL	No Exceedance
G11	UA	A6DR	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 10/24/23	13	0	CI around mean	0.238	5	MCL/HBL	No Exceedance
G11	UA	A7	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 01/30/24	14	0	CI around mean	0.303	5	MCL/HBL	No Exceedance
G11	UA	A7R	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 04/22/24	15	0	CI around mean	0.341	5	MCL/HBL	No Exceedance
G11	UA	A7D	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 07/23/24	16	0	CI around geomean	0.284	5	MCL/HBL	No Exceedance
G11	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	03/04/21 - 10/21/24	17	0	CI around geomean	0.261	5	MCL/HBL	No Exceedance
G11	UA	A6D	Selenium, total	mg/L	03/04/21 - 09/26/23	12	0	CI around mean	0.00401	0.05	MCL/HBL	No Exceedance
G11	UA	A6DR	Selenium, total	mg/L	03/04/21 - 10/24/23	13	0	CB around linear reg	-0.00230	0.05	MCL/HBL	No Exceedance
G11	UA	A7	Selenium, total	mg/L	03/04/21 - 01/30/24	14	0	CB around linear reg	-0.00254	0.05	MCL/HBL	No Exceedance
G11	UA	A7R	Selenium, total	mg/L	03/04/21 - 04/22/24	15	0	CB around linear reg	-0.00266	0.05	MCL/HBL	No Exceedance
G11	UA	A7D	Selenium, total	mg/L	03/04/21 - 07/23/24	16	0	CB around linear reg	-0.00253	0.05	MCL/HBL	No Exceedance
G11	UA	A7DR	Selenium, total	mg/L	03/04/21 - 10/21/24	17	0	CB around linear reg	-0.00252	0.05	MCL/HBL	No Exceedance
G11	UA	A6D	Thallium, total	mg/L	03/04/21 - 09/26/23	12	91	CI around median	0.00200	0.002	MCL/HBL	No Exceedance
G11	UA	A6DR	Thallium, total	mg/L	03/04/21 - 10/24/23	13	92	CI around median	0.00200	0.002	MCL/HBL	No Exceedance
G11	UA	A7	Thallium, total	mg/L	03/04/21 - 01/30/24	14	92	CI around median	0.00200	0.002	MCL/HBL	No Exceedance
G11	UA	A7R	Thallium, total	mg/L	03/04/21 - 04/22/24	15	93	CI around median	0.00200	0.002	MCL/HBL	No Exceedance
G11	UA	A7D	Thallium, total	mg/L	03/04/21 - 07/23/24	16	93	CI around median	0.00200	0.002	MCL/HBL	No Exceedance
G11	UA	A7DR	Thallium, total	mg/L	03/04/21 - 10/21/24	17	94	CI around median	0.00200	0.002	MCL/HBL	No Exceedance
G51D	UA	A6D	Antimony, total	mg/L	12/03/15 - 09/25/23	17	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G51D	UA	A6DR	Antimony, total	mg/L	12/03/15 - 10/25/23	18	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G51D	UA	A7	Antimony, total	mg/L	12/03/15 - 01/30/24	19	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G51D	UA	A7R	Antimony, total	mg/L	12/03/15 - 04/22/24	20	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G51D	UA	A7D	Antimony, total	mg/L	12/03/15 - 07/23/24	21	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G51D	UA	A7DR	Antimony, total	mg/L	12/03/15 - 10/21/24	22	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G51D	UA	A6D	Arsenic, total	mg/L	12/03/15 - 09/25/23	22	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance
G51D	UA	A6DR	Arsenic, total	mg/L	12/03/15 - 10/25/23	23	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance
G51D	UA	A7	Arsenic, total	mg/L	12/03/15 - 01/30/24	24	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G51D	UA	A7R	Arsenic, total	mg/L	12/03/15 - 04/22/24	25	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance
G51D	UA	A7D	Arsenic, total	mg/L	12/03/15 - 07/23/24	26	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance
G51D	UA	A7DR	Arsenic, total	mg/L	12/03/15 - 10/21/24	27	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance
G51D	UA	A6D	Barium, total	mg/L	12/03/15 - 09/25/23	22	0	CB around T-S line	-0.00761	2.0	MCL/HBL	No Exceedance
G51D	UA	A6DR	Barium, total	mg/L	12/03/15 - 10/25/23	23	0	CB around T-S line	0.00372	2.0	MCL/HBL	No Exceedance
G51D	UA	A7	Barium, total	mg/L	12/03/15 - 01/30/24	24	0	CB around T-S line	0.0151	2.0	MCL/HBL	No Exceedance
G51D	UA	A7R	Barium, total	mg/L	12/03/15 - 04/22/24	25	0	CB around T-S line	0.0131	2.0	MCL/HBL	No Exceedance
G51D	UA	A7D	Barium, total	mg/L	12/03/15 - 07/23/24	26	0	CB around T-S line	0.0177	2.0	MCL/HBL	No Exceedance
G51D	UA	A7DR	Barium, total	mg/L	12/03/15 - 10/21/24	27	0	CB around T-S line	0.0160	2.0	MCL/HBL	No Exceedance
G51D	UA	A6D	Beryllium, total	mg/L	12/03/15 - 09/25/23	17	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G51D	UA	A6DR	Beryllium, total	mg/L	12/03/15 - 10/25/23	18	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G51D	UA	A7	Beryllium, total	mg/L	12/03/15 - 01/30/24	19	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G51D	UA	A7R	Beryllium, total	mg/L	12/03/15 - 04/22/24	20	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G51D	UA	A7D	Beryllium, total	mg/L	12/03/15 - 07/23/24	21	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G51D	UA	A7DR	Beryllium, total	mg/L	12/03/15 - 10/21/24	22	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G51D	UA	A6D	Cadmium, total	mg/L	12/03/15 - 09/25/23	17	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G51D	UA	A6DR	Cadmium, total	mg/L	12/03/15 - 10/25/23	18	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G51D	UA	A7	Cadmium, total	mg/L	12/03/15 - 01/30/24	19	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G51D	UA	A7R	Cadmium, total	mg/L	12/03/15 - 04/22/24	20	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G51D	UA	A7D	Cadmium, total	mg/L	12/03/15 - 07/23/24	21	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G51D	UA	A7DR	Cadmium, total	mg/L	12/03/15 - 10/21/24	22	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G51D	UA	A6D	Chromium, total	mg/L	12/03/15 - 09/25/23	22	72	CB around T-S line	0.00116	0.1	MCL/HBL	No Exceedance
G51D	UA	A6DR	Chromium, total	mg/L	12/03/15 - 10/25/23	23	73	CB around T-S line	0.00149	0.1	MCL/HBL	No Exceedance
G51D	UA	A7	Chromium, total	mg/L	12/03/15 - 01/30/24	24	70	CB around T-S line	0.00150	0.1	MCL/HBL	No Exceedance
G51D	UA	A7R	Chromium, total	mg/L	12/03/15 - 04/22/24	25	68	CB around T-S line	0.00152	0.1	MCL/HBL	No Exceedance
G51D	UA	A7D	Chromium, total	mg/L	12/03/15 - 07/23/24	26	65	CB around T-S line	0.00150	0.1	MCL/HBL	No Exceedance
G51D	UA	A7DR	Chromium, total	mg/L	12/03/15 - 10/21/24	27	62	CB around T-S line	0.00152	0.1	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G51D	UA	A6D	Cobalt, total	mg/L	12/03/15 - 09/25/23	22	13	CB around T-S line	-0.0152	0.0366	Background	No Exceedance
G51D	UA	A6DR	Cobalt, total	mg/L	12/03/15 - 10/25/23	23	17	CB around T-S line	-0.0109	0.0366	Background	No Exceedance
G51D	UA	A7	Cobalt, total	mg/L	12/03/15 - 01/30/24	24	16	CB around T-S line	-0.0118	0.0366	Background	No Exceedance
G51D	UA	A7R	Cobalt, total	mg/L	12/03/15 - 04/22/24	25	20	CB around T-S line	-0.0121	0.0366	Background	No Exceedance
G51D	UA	A7D	Cobalt, total	mg/L	12/03/15 - 07/23/24	26	23	CB around T-S line	-0.0101	0.0366	Background	No Exceedance
G51D	UA	A7DR	Cobalt, total	mg/L	12/03/15 - 10/21/24	27	22	CB around T-S line	-0.0108	0.0366	Background	No Exceedance
G51D	UA	A6D	Fluoride, total	mg/L	12/03/15 - 09/25/23	23	86	CI around median	0.100	4.0	MCL/HBL	No Exceedance
G51D	UA	A6DR	Fluoride, total	mg/L	12/03/15 - 10/25/23	24	83	CI around median	0.100	4.0	MCL/HBL	No Exceedance
G51D	UA	A7	Fluoride, total	mg/L	12/03/15 - 01/30/24	25	84	CI around median	0.100	4.0	MCL/HBL	No Exceedance
G51D	UA	A7R	Fluoride, total	mg/L	12/03/15 - 04/22/24	26	84	CI around median	0.100	4.0	MCL/HBL	No Exceedance
G51D	UA	A7D	Fluoride, total	mg/L	12/03/15 - 07/23/24	27	81	CI around median	0.100	4.0	MCL/HBL	No Exceedance
G51D	UA	A7DR	Fluoride, total	mg/L	12/03/15 - 10/21/24	28	82	CI around median	0.100	4.0	MCL/HBL	No Exceedance
G51D	UA	A6D	Lead, total	mg/L	12/03/15 - 09/25/23	22	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G51D	UA	A6DR	Lead, total	mg/L	12/03/15 - 10/25/23	23	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G51D	UA	A7	Lead, total	mg/L	12/03/15 - 01/30/24	24	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G51D	UA	A7R	Lead, total	mg/L	12/03/15 - 04/22/24	25	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G51D	UA	A7D	Lead, total	mg/L	12/03/15 - 07/23/24	26	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G51D	UA	A7DR	Lead, total	mg/L	12/03/15 - 10/21/24	27	96	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G51D	UA	A6D	Lithium, total	mg/L	12/03/15 - 09/25/23	22	4	CB around T-S line	0.00579	0.04	MCL/HBL	No Exceedance
G51D	UA	A6DR	Lithium, total	mg/L	12/03/15 - 10/25/23	23	4	CB around T-S line	0.00554	0.04	MCL/HBL	No Exceedance
G51D	UA	A7	Lithium, total	mg/L	12/03/15 - 01/30/24	24	4	CB around T-S line	0.00545	0.04	MCL/HBL	No Exceedance
G51D	UA	A7R	Lithium, total	mg/L	12/03/15 - 04/22/24	25	4	CB around T-S line	0.00556	0.04	MCL/HBL	No Exceedance
G51D	UA	A7D	Lithium, total	mg/L	12/03/15 - 07/23/24	26	3	CI around median	0.00530	0.04	MCL/HBL	No Exceedance
G51D	UA	A7DR	Lithium, total	mg/L	12/03/15 - 10/21/24	27	3	CB around T-S line	0.00560	0.04	MCL/HBL	No Exceedance
G51D	UA	A6D	Mercury, total	mg/L	12/03/15 - 09/25/23	17	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G51D	UA	A6DR	Mercury, total	mg/L	12/03/15 - 10/25/23	18	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G51D	UA	A7	Mercury, total	mg/L	12/03/15 - 01/30/24	19	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G51D	UA	A7R	Mercury, total	mg/L	12/03/15 - 04/22/24	20	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G51D	UA	A7D	Mercury, total	mg/L	12/03/15 - 07/23/24	21	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G51D	UA	A7DR	Mercury, total	mg/L	12/03/15 - 10/21/24	22	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G51D	UA	A6D	Molybdenum, total	mg/L	12/03/15 - 09/25/23	18	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G51D	UA	A6DR	Molybdenum, total	mg/L	12/03/15 - 10/25/23	19	94	CB around T-S line	0.00100	0.1	MCL/HBL	No Exceedance
G51D	UA	A7	Molybdenum, total	mg/L	12/03/15 - 01/30/24	20	95	CB around T-S line	0.00121	0.1	MCL/HBL	No Exceedance
G51D	UA	A7R	Molybdenum, total	mg/L	12/03/15 - 04/22/24	21	95	CB around T-S line	0.00142	0.1	MCL/HBL	No Exceedance
G51D	UA	A7D	Molybdenum, total	mg/L	12/03/15 - 07/23/24	22	95	CB around T-S line	0.00100	0.1	MCL/HBL	No Exceedance
G51D	UA	A7DR	Molybdenum, total	mg/L	12/03/15 - 10/21/24	23	95	CB around T-S line	0.00143	0.1	MCL/HBL	No Exceedance
G51D	UA	A6D	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 09/25/23	22	0	CI around mean	0.452	5	MCL/HBL	No Exceedance
G51D	UA	A6DR	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 10/25/23	23	0	CI around mean	0.469	5	MCL/HBL	No Exceedance
G51D	UA	A7	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 01/30/24	24	0	CI around mean	0.503	5	MCL/HBL	No Exceedance
G51D	UA	A7R	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 04/22/24	25	0	CI around mean	0.533	5	MCL/HBL	No Exceedance
G51D	UA	A7D	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 07/23/24	26	0	CI around mean	0.539	5	MCL/HBL	No Exceedance
G51D	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 10/21/24	27	0	CI around mean	0.518	5	MCL/HBL	No Exceedance
G51D	UA	A6D	Selenium, total	mg/L	12/03/15 - 09/25/23	22	4	CB around T-S line	0.00454	0.05	MCL/HBL	No Exceedance
G51D	UA	A6DR	Selenium, total	mg/L	12/03/15 - 10/25/23	23	4	CB around T-S line	0.00412	0.05	MCL/HBL	No Exceedance
G51D	UA	A7	Selenium, total	mg/L	12/03/15 - 01/30/24	24	4	CB around T-S line	0.00450	0.05	MCL/HBL	No Exceedance
G51D	UA	A7R	Selenium, total	mg/L	12/03/15 - 04/22/24	25	4	CB around T-S line	0.00460	0.05	MCL/HBL	No Exceedance
G51D	UA	A7D	Selenium, total	mg/L	12/03/15 - 07/23/24	26	3	CB around T-S line	0.00458	0.05	MCL/HBL	No Exceedance
G51D	UA	A7DR	Selenium, total	mg/L	12/03/15 - 10/21/24	27	3	CB around T-S line	0.00464	0.05	MCL/HBL	No Exceedance
G51D	UA	A6D	Thallium, total	mg/L	12/03/15 - 09/25/23	17	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G51D	UA	A6DR	Thallium, total	mg/L	12/03/15 - 10/25/23	18	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G51D	UA	A7	Thallium, total	mg/L	12/03/15 - 01/30/24	19	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G51D	UA	A7R	Thallium, total	mg/L	12/03/15 - 04/22/24	20	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G51D	UA	A7D	Thallium, total	mg/L	12/03/15 - 07/23/24	21	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G51D	UA	A7DR	Thallium, total	mg/L	12/03/15 - 10/21/24	22	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G52D	UA	A6D	Antimony, total	mg/L	12/03/15 - 09/26/23	16	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G52D	UA	A6DR	Antimony, total	mg/L	12/03/15 - 10/24/23	17	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G52D	UA	A7	Antimony, total	mg/L	12/03/15 - 01/31/24	18	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G52D	UA	A7R	Antimony, total	mg/L	12/03/15 - 04/23/24	19	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G52D	UA	A7D	Antimony, total	mg/L	12/03/15 - 07/23/24	20	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G52D	UA	A7DR	Antimony, total	mg/L	12/03/15 - 10/22/24	21	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G52D	UA	A6D	Arsenic, total	mg/L	12/03/15 - 09/26/23	21	9	CB around linear reg	-0.000734	0.010	MCL/HBL	No Exceedance
G52D	UA	A6DR	Arsenic, total	mg/L	12/03/15 - 10/24/23	22	9	CB around linear reg	-0.000569	0.010	MCL/HBL	No Exceedance
G52D	UA	A7	Arsenic, total	mg/L	12/03/15 - 01/31/24	23	8	CB around linear reg	-0.000558	0.010	MCL/HBL	No Exceedance
G52D	UA	A7R	Arsenic, total	mg/L	12/03/15 - 04/23/24	24	8	CB around linear reg	-0.000536	0.010	MCL/HBL	No Exceedance
G52D	UA	A7D	Arsenic, total	mg/L	12/03/15 - 07/23/24	25	8	CB around linear reg	-0.000531	0.010	MCL/HBL	No Exceedance
G52D	UA	A7DR	Arsenic, total	mg/L	12/03/15 - 10/22/24	26	7	CB around linear reg	-0.000482	0.010	MCL/HBL	No Exceedance
G52D	UA	A6D	Barium, total	mg/L	12/03/15 - 09/26/23	21	0	CB around linear reg	0.113	2.0	MCL/HBL	No Exceedance
G52D	UA	A6DR	Barium, total	mg/L	12/03/15 - 10/24/23	22	0	CB around linear reg	0.134	2.0	MCL/HBL	No Exceedance
G52D	UA	A7	Barium, total	mg/L	12/03/15 - 01/31/24	23	0	CB around T-S line	0.117	2.0	MCL/HBL	No Exceedance
G52D	UA	A7R	Barium, total	mg/L	12/03/15 - 04/23/24	24	0	CB around T-S line	0.106	2.0	MCL/HBL	No Exceedance
G52D	UA	A7D	Barium, total	mg/L	12/03/15 - 07/23/24	25	0	CB around linear reg	0.149	2.0	MCL/HBL	No Exceedance
G52D	UA	A7DR	Barium, total	mg/L	12/03/15 - 10/22/24	26	0	CB around linear reg	0.156	2.0	MCL/HBL	No Exceedance
G52D	UA	A6D	Beryllium, total	mg/L	12/03/15 - 09/26/23	16	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G52D	UA	A6DR	Beryllium, total	mg/L	12/03/15 - 10/24/23	17	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G52D	UA	A7	Beryllium, total	mg/L	12/03/15 - 01/31/24	18	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G52D	UA	A7R	Beryllium, total	mg/L	12/03/15 - 04/23/24	19	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G52D	UA	A7D	Beryllium, total	mg/L	12/03/15 - 07/23/24	20	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G52D	UA	A7DR	Beryllium, total	mg/L	12/03/15 - 10/22/24	21	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G52D	UA	A6D	Cadmium, total	mg/L	12/03/15 - 09/26/23	16	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G52D	UA	A6DR	Cadmium, total	mg/L	12/03/15 - 10/24/23	17	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G52D	UA	A7	Cadmium, total	mg/L	12/03/15 - 01/31/24	18	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G52D	UA	A7R	Cadmium, total	mg/L	12/03/15 - 04/23/24	19	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G52D	UA	A7D	Cadmium, total	mg/L	12/03/15 - 07/23/24	20	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G52D	UA	A7DR	Cadmium, total	mg/L	12/03/15 - 10/22/24	21	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G52D	UA	A6D	Chromium, total	mg/L	12/03/15 - 09/26/23	21	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G52D	UA	A6DR	Chromium, total	mg/L	12/03/15 - 10/24/23	22	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G52D	UA	A7	Chromium, total	mg/L	12/03/15 - 01/31/24	23	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G52D	UA	A7R	Chromium, total	mg/L	12/03/15 - 04/23/24	24	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G52D	UA	A7D	Chromium, total	mg/L	12/03/15 - 07/23/24	25	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G52D	UA	A7DR	Chromium, total	mg/L	12/03/15 - 10/22/24	26	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G52D	UA	A6D	Cobalt, total	mg/L	12/03/15 - 09/26/23	21	0	CI around mean	0.00287	0.0366	Background	No Exceedance
G52D	UA	A6DR	Cobalt, total	mg/L	12/03/15 - 10/24/23	22	0	CI around mean	0.00290	0.0366	Background	No Exceedance
G52D	UA	A7	Cobalt, total	mg/L	12/03/15 - 01/31/24	23	0	CI around mean	0.00292	0.0366	Background	No Exceedance
G52D	UA	A7R	Cobalt, total	mg/L	12/03/15 - 04/23/24	24	0	CI around mean	0.00295	0.0366	Background	No Exceedance
G52D	UA	A7D	Cobalt, total	mg/L	12/03/15 - 07/23/24	25	0	CI around mean	0.00299	0.0366	Background	No Exceedance
G52D	UA	A7DR	Cobalt, total	mg/L	12/03/15 - 10/22/24	26	0	CI around mean	0.00303	0.0366	Background	No Exceedance
G52D	UA	A6D	Fluoride, total	mg/L	12/03/15 - 09/26/23	22	0	CI around median	0.240	4.0	MCL/HBL	No Exceedance
G52D	UA	A6DR	Fluoride, total	mg/L	12/03/15 - 10/24/23	23	0	CI around median	0.240	4.0	MCL/HBL	No Exceedance
G52D	UA	A7	Fluoride, total	mg/L	12/03/15 - 01/31/24	24	0	CI around median	0.250	4.0	MCL/HBL	No Exceedance
G52D	UA	A7R	Fluoride, total	mg/L	12/03/15 - 04/23/24	25	0	CI around median	0.250	4.0	MCL/HBL	No Exceedance
G52D	UA	A7D	Fluoride, total	mg/L	12/03/15 - 07/23/24	26	0	CI around median	0.250	4.0	MCL/HBL	No Exceedance
G52D	UA	A7DR	Fluoride, total	mg/L	12/03/15 - 10/22/24	27	3	CI around median	0.250	4.0	MCL/HBL	No Exceedance
G52D	UA	A6D	Lead, total	mg/L	12/03/15 - 09/26/23	21	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G52D	UA	A6DR	Lead, total	mg/L	12/03/15 - 10/24/23	22	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G52D	UA	A7	Lead, total	mg/L	12/03/15 - 01/31/24	23	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G52D	UA	A7R	Lead, total	mg/L	12/03/15 - 04/23/24	24	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G52D	UA	A7D	Lead, total	mg/L	12/03/15 - 07/23/24	25	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G52D	UA	A7DR	Lead, total	mg/L	12/03/15 - 10/22/24	26	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G52D	UA	A6D	Lithium, total	mg/L	12/03/15 - 09/26/23	21	42	CI around geomean	0.00250	0.04	MCL/HBL	No Exceedance
G52D	UA	A6DR	Lithium, total	mg/L	12/03/15 - 10/24/23	22	45	CI around geomean	0.00250	0.04	MCL/HBL	No Exceedance
G52D	UA	A7	Lithium, total	mg/L	12/03/15 - 01/31/24	23	47	CI around median	0.00280	0.04	MCL/HBL	No Exceedance
G52D	UA	A7R	Lithium, total	mg/L	12/03/15 - 04/23/24	24	50	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G52D	UA	A7D	Lithium, total	mg/L	12/03/15 - 07/23/24	25	48	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G52D	UA	A7DR	Lithium, total	mg/L	12/03/15 - 10/22/24	26	46	CI around median	0.00300	0.04	MCL/HBL	No Exceedance
G52D	UA	A6D	Mercury, total	mg/L	12/03/15 - 09/26/23	16	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G52D	UA	A6DR	Mercury, total	mg/L	12/03/15 - 10/24/23	17	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G52D	UA	A7	Mercury, total	mg/L	12/03/15 - 01/31/24	18	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G52D	UA	A7R	Mercury, total	mg/L	12/03/15 - 04/23/24	19	94	Most recent sample	0.000200	0.002	MCL/HBL	No Exceedance
G52D	UA	A7D	Mercury, total	mg/L	12/03/15 - 07/23/24	20	95	Most recent sample	0.000200	0.002	MCL/HBL	No Exceedance
G52D	UA	A7DR	Mercury, total	mg/L	12/03/15 - 10/22/24	21	95	Most recent sample	0.000200	0.002	MCL/HBL	No Exceedance
G52D	UA	A6D	Molybdenum, total	mg/L	12/03/15 - 09/26/23	17	76	CI around median	0.00100	0.1	MCL/HBL	No Exceedance
G52D	UA	A6DR	Molybdenum, total	mg/L	12/03/15 - 10/24/23	18	77	CI around median	0.00110	0.1	MCL/HBL	No Exceedance
G52D	UA	A7	Molybdenum, total	mg/L	12/03/15 - 01/31/24	19	78	CI around median	0.00110	0.1	MCL/HBL	No Exceedance
G52D	UA	A7R	Molybdenum, total	mg/L	12/03/15 - 04/23/24	20	80	CI around median	0.00110	0.1	MCL/HBL	No Exceedance
G52D	UA	A7D	Molybdenum, total	mg/L	12/03/15 - 07/23/24	21	80	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G52D	UA	A7DR	Molybdenum, total	mg/L	12/03/15 - 10/22/24	22	81	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G52D	UA	A6D	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 09/26/23	21	0	CI around mean	0.824	5	MCL/HBL	No Exceedance
G52D	UA	A6DR	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 10/24/23	22	0	CI around mean	0.849	5	MCL/HBL	No Exceedance
G52D	UA	A7	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 01/31/24	23	0	CI around mean	0.882	5	MCL/HBL	No Exceedance
G52D	UA	A7R	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 04/23/24	24	0	CI around mean	0.896	5	MCL/HBL	No Exceedance
G52D	UA	A7D	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 07/23/24	25	0	CI around mean	0.911	5	MCL/HBL	No Exceedance
G52D	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 10/22/24	26	0	CI around mean	0.930	5	MCL/HBL	No Exceedance
G52D	UA	A6D	Selenium, total	mg/L	12/03/15 - 09/26/23	21	95	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
G52D	UA	A6DR	Selenium, total	mg/L	12/03/15 - 10/24/23	22	95	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
G52D	UA	A7	Selenium, total	mg/L	12/03/15 - 01/31/24	23	95	CI around median	0.00100	0.05	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G52D	UA	A7R	Selenium, total	mg/L	12/03/15 - 04/23/24	24	95	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
G52D	UA	A7D	Selenium, total	mg/L	12/03/15 - 07/23/24	25	96	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
G52D	UA	A7DR	Selenium, total	mg/L	12/03/15 - 10/22/24	26	96	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
G52D	UA	A6D	Thallium, total	mg/L	12/03/15 - 09/26/23	16	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G52D	UA	A6DR	Thallium, total	mg/L	12/03/15 - 10/24/23	17	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G52D	UA	A7	Thallium, total	mg/L	12/03/15 - 01/31/24	18	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G52D	UA	A7R	Thallium, total	mg/L	12/03/15 - 04/23/24	19	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G52D	UA	A7D	Thallium, total	mg/L	12/03/15 - 07/23/24	20	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G52D	UA	A7DR	Thallium, total	mg/L	12/03/15 - 10/22/24	21	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G53D	UA	A6D	Antimony, total	mg/L	12/03/15 - 09/27/23	17	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G53D	UA	A6DR	Antimony, total	mg/L	12/03/15 - 10/25/23	18	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G53D	UA	A7	Antimony, total	mg/L	12/03/15 - 01/30/24	19	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G53D	UA	A7R	Antimony, total	mg/L	12/03/15 - 04/23/24	20	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G53D	UA	A7D	Antimony, total	mg/L	12/03/15 - 07/24/24	21	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G53D	UA	A7DR	Antimony, total	mg/L	12/03/15 - 10/22/24	22	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G53D	UA	A6D	Arsenic, total	mg/L	12/03/15 - 09/27/23	22	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance
G53D	UA	A6DR	Arsenic, total	mg/L	12/03/15 - 10/25/23	23	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance
G53D	UA	A7	Arsenic, total	mg/L	12/03/15 - 01/30/24	24	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance
G53D	UA	A7R	Arsenic, total	mg/L	12/03/15 - 04/23/24	25	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance
G53D	UA	A7D	Arsenic, total	mg/L	12/03/15 - 07/24/24	26	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance
G53D	UA	A7DR	Arsenic, total	mg/L	12/03/15 - 10/22/24	27	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance
G53D	UA	A6D	Barium, total	mg/L	12/03/15 - 09/27/23	22	0	CB around linear reg	0.0177	2.0	MCL/HBL	No Exceedance
G53D	UA	A6DR	Barium, total	mg/L	12/03/15 - 10/25/23	23	0	CB around T-S line	-0.0271	2.0	MCL/HBL	No Exceedance
G53D	UA	A7	Barium, total	mg/L	12/03/15 - 01/30/24	24	0	CB around T-S line	-0.0258	2.0	MCL/HBL	No Exceedance
G53D	UA	A7R	Barium, total	mg/L	12/03/15 - 04/23/24	25	0	CB around T-S line	-0.00519	2.0	MCL/HBL	No Exceedance
G53D	UA	A7D	Barium, total	mg/L	12/03/15 - 07/24/24	26	0	CB around T-S line	-0.0277	2.0	MCL/HBL	No Exceedance
G53D	UA	A7DR	Barium, total	mg/L	12/03/15 - 10/22/24	27	0	CB around T-S line	0.000421	2.0	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G53D	UA	A6D	Beryllium, total	mg/L	12/03/15 - 09/27/23	17	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G53D	UA	A6DR	Beryllium, total	mg/L	12/03/15 - 10/25/23	18	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G53D	UA	A7	Beryllium, total	mg/L	12/03/15 - 01/30/24	19	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G53D	UA	A7R	Beryllium, total	mg/L	12/03/15 - 04/23/24	20	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G53D	UA	A7D	Beryllium, total	mg/L	12/03/15 - 07/24/24	21	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G53D	UA	A7DR	Beryllium, total	mg/L	12/03/15 - 10/22/24	22	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G53D	UA	A6D	Cadmium, total	mg/L	12/03/15 - 09/27/23	17	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G53D	UA	A6DR	Cadmium, total	mg/L	12/03/15 - 10/25/23	18	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G53D	UA	A7	Cadmium, total	mg/L	12/03/15 - 01/30/24	19	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G53D	UA	A7R	Cadmium, total	mg/L	12/03/15 - 04/23/24	20	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G53D	UA	A7D	Cadmium, total	mg/L	12/03/15 - 07/24/24	21	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G53D	UA	A7DR	Cadmium, total	mg/L	12/03/15 - 10/22/24	22	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G53D	UA	A6D	Chromium, total	mg/L	12/03/15 - 09/27/23	22	86	CI around median	0.00100	0.1	MCL/HBL	No Exceedance
G53D	UA	A6DR	Chromium, total	mg/L	12/03/15 - 10/25/23	23	86	CI around median	0.00100	0.1	MCL/HBL	No Exceedance
G53D	UA	A7	Chromium, total	mg/L	12/03/15 - 01/30/24	24	83	CB around T-S line	0.00150	0.1	MCL/HBL	No Exceedance
G53D	UA	A7R	Chromium, total	mg/L	12/03/15 - 04/23/24	25	80	CB around T-S line	0.00150	0.1	MCL/HBL	No Exceedance
G53D	UA	A7D	Chromium, total	mg/L	12/03/15 - 07/24/24	26	80	CB around T-S line	0.00150	0.1	MCL/HBL	No Exceedance
G53D	UA	A7DR	Chromium, total	mg/L	12/03/15 - 10/22/24	27	81	CB around T-S line	0.00150	0.1	MCL/HBL	No Exceedance
G53D	UA	A6D	Cobalt, total	mg/L	12/03/15 - 09/27/23	22	18	CI around median	0.00130	0.0366	Background	No Exceedance
G53D	UA	A6DR	Cobalt, total	mg/L	12/03/15 - 10/25/23	23	17	CI around median	0.00120	0.0366	Background	No Exceedance
G53D	UA	A7	Cobalt, total	mg/L	12/03/15 - 01/30/24	24	16	CI around median	0.00130	0.0366	Background	No Exceedance
G53D	UA	A7R	Cobalt, total	mg/L	12/03/15 - 04/23/24	25	16	CI around median	0.00130	0.0366	Background	No Exceedance
G53D	UA	A7D	Cobalt, total	mg/L	12/03/15 - 07/24/24	26	15	CI around median	0.00130	0.0366	Background	No Exceedance
G53D	UA	A7DR	Cobalt, total	mg/L	12/03/15 - 10/22/24	27	14	CI around geomean	0.00123	0.0366	Background	No Exceedance
G53D	UA	A6D	Fluoride, total	mg/L	12/03/15 - 09/27/23	23	0	CI around mean	0.641	4.0	MCL/HBL	No Exceedance
G53D	UA	A6DR	Fluoride, total	mg/L	12/03/15 - 10/25/23	24	0	CI around mean	0.644	4.0	MCL/HBL	No Exceedance
G53D	UA	A7	Fluoride, total	mg/L	12/03/15 - 01/30/24	25	0	CI around mean	0.645	4.0	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G53D	UA	A7R	Fluoride, total	mg/L	12/03/15 - 04/23/24	26	0	CI around mean	0.646	4.0	MCL/HBL	No Exceedance
G53D	UA	A7D	Fluoride, total	mg/L	12/03/15 - 07/24/24	27	0	CI around mean	0.649	4.0	MCL/HBL	No Exceedance
G53D	UA	A7DR	Fluoride, total	mg/L	12/03/15 - 10/22/24	28	0	CI around mean	0.646	4.0	MCL/HBL	No Exceedance
G53D	UA	A6D	Lead, total	mg/L	12/03/15 - 09/27/23	22	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G53D	UA	A6DR	Lead, total	mg/L	12/03/15 - 10/25/23	23	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G53D	UA	A7	Lead, total	mg/L	12/03/15 - 01/30/24	24	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G53D	UA	A7R	Lead, total	mg/L	12/03/15 - 04/23/24	25	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G53D	UA	A7D	Lead, total	mg/L	12/03/15 - 07/24/24	26	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G53D	UA	A7DR	Lead, total	mg/L	12/03/15 - 10/22/24	27	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G53D	UA	A6D	Lithium, total	mg/L	12/03/15 - 09/27/23	22	54	CB around T-S line	0.00266	0.04	MCL/HBL	No Exceedance
G53D	UA	A6DR	Lithium, total	mg/L	12/03/15 - 10/25/23	23	56	CB around T-S line	0.00267	0.04	MCL/HBL	No Exceedance
G53D	UA	A7	Lithium, total	mg/L	12/03/15 - 01/30/24	24	58	CB around T-S line	0.00280	0.04	MCL/HBL	No Exceedance
G53D	UA	A7R	Lithium, total	mg/L	12/03/15 - 04/23/24	25	60	CB around T-S line	0.00287	0.04	MCL/HBL	No Exceedance
G53D	UA	A7D	Lithium, total	mg/L	12/03/15 - 07/24/24	26	61	CB around T-S line	0.00286	0.04	MCL/HBL	No Exceedance
G53D	UA	A7DR	Lithium, total	mg/L	12/03/15 - 10/22/24	27	62	CB around T-S line	0.00286	0.04	MCL/HBL	No Exceedance
G53D	UA	A6D	Mercury, total	mg/L	12/03/15 - 09/27/23	17	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G53D	UA	A6DR	Mercury, total	mg/L	12/03/15 - 10/25/23	18	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G53D	UA	A7	Mercury, total	mg/L	12/03/15 - 01/30/24	19	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G53D	UA	A7R	Mercury, total	mg/L	12/03/15 - 04/23/24	20	95	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G53D	UA	A7D	Mercury, total	mg/L	12/03/15 - 07/24/24	21	95	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G53D	UA	A7DR	Mercury, total	mg/L	12/03/15 - 10/22/24	22	95	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G53D	UA	A6D	Molybdenum, total	mg/L	12/03/15 - 09/27/23	18	88	CB around T-S line	0.00100	0.1	MCL/HBL	No Exceedance
G53D	UA	A6DR	Molybdenum, total	mg/L	12/03/15 - 10/25/23	19	89	CB around T-S line	0.00100	0.1	MCL/HBL	No Exceedance
G53D	UA	A7	Molybdenum, total	mg/L	12/03/15 - 01/30/24	20	90	CB around T-S line	0.00118	0.1	MCL/HBL	No Exceedance
G53D	UA	A7R	Molybdenum, total	mg/L	12/03/15 - 04/23/24	21	90	CB around T-S line	0.00134	0.1	MCL/HBL	No Exceedance
G53D	UA	A7D	Molybdenum, total	mg/L	12/03/15 - 07/24/24	22	90	CB around T-S line	0.00112	0.1	MCL/HBL	No Exceedance
G53D	UA	A7DR	Molybdenum, total	mg/L	12/03/15 - 10/22/24	23	91	CB around T-S line	0.00145	0.1	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G53D	UA	A6D	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 09/27/23	22	0	CI around mean	0.351	5	MCL/HBL	No Exceedance
G53D	UA	A6DR	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 10/25/23	23	0	CI around mean	0.363	5	MCL/HBL	No Exceedance
G53D	UA	A7	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 01/30/24	24	0	CI around mean	0.381	5	MCL/HBL	No Exceedance
G53D	UA	A7R	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 04/23/24	25	0	CI around mean	0.378	5	MCL/HBL	No Exceedance
G53D	UA	A7D	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 07/24/24	26	0	CI around geomean	0.248	5	MCL/HBL	No Exceedance
G53D	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 10/22/24	27	0	CI around geomean	0.256	5	MCL/HBL	No Exceedance
G53D	UA	A6D	Selenium, total	mg/L	12/03/15 - 09/27/23	22	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G53D	UA	A6DR	Selenium, total	mg/L	12/03/15 - 10/25/23	23	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G53D	UA	A7	Selenium, total	mg/L	12/03/15 - 01/30/24	24	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G53D	UA	A7R	Selenium, total	mg/L	12/03/15 - 04/23/24	25	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G53D	UA	A7D	Selenium, total	mg/L	12/03/15 - 07/24/24	26	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G53D	UA	A7DR	Selenium, total	mg/L	12/03/15 - 10/22/24	27	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G53D	UA	A6D	Thallium, total	mg/L	12/03/15 - 09/27/23	17	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G53D	UA	A6DR	Thallium, total	mg/L	12/03/15 - 10/25/23	18	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G53D	UA	A7	Thallium, total	mg/L	12/03/15 - 01/30/24	19	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G53D	UA	A7R	Thallium, total	mg/L	12/03/15 - 04/23/24	20	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G53D	UA	A7D	Thallium, total	mg/L	12/03/15 - 07/24/24	21	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G53D	UA	A7DR	Thallium, total	mg/L	12/03/15 - 10/22/24	22	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G54D	UA	A6D	Antimony, total	mg/L	12/03/15 - 09/26/23	17	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G54D	UA	A6DR	Antimony, total	mg/L	12/03/15 - 10/25/23	18	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G54D	UA	A7	Antimony, total	mg/L	12/03/15 - 01/31/24	19	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G54D	UA	A7R	Antimony, total	mg/L	12/03/15 - 04/22/24	20	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G54D	UA	A7D	Antimony, total	mg/L	12/03/15 - 07/23/24	21	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G54D	UA	A7DR	Antimony, total	mg/L	12/03/15 - 10/22/24	22	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G54D	UA	A6D	Arsenic, total	mg/L	12/03/15 - 09/26/23	22	50	CB around T-S line	-0.000236	0.010	MCL/HBL	No Exceedance
G54D	UA	A6DR	Arsenic, total	mg/L	12/03/15 - 10/25/23	23	47	CB around T-S line	-0.000139	0.010	MCL/HBL	No Exceedance
G54D	UA	A7	Arsenic, total	mg/L	12/03/15 - 01/31/24	24	50	CB around T-S line	-0.000185	0.010	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G54D	UA	A7R	Arsenic, total	mg/L	12/03/15 - 04/22/24	25	52	CB around T-S line	-0.000236	0.010	MCL/HBL	No Exceedance
G54D	UA	A7D	Arsenic, total	mg/L	12/03/15 - 07/23/24	26	53	CB around T-S line	-0.0000740	0.010	MCL/HBL	No Exceedance
G54D	UA	A7DR	Arsenic, total	mg/L	12/03/15 - 10/22/24	27	55	CB around T-S line	-0.000158	0.010	MCL/HBL	No Exceedance
G54D	UA	A6D	Barium, total	mg/L	12/03/15 - 09/26/23	22	0	CB around T-S line	0.0612	2.0	MCL/HBL	No Exceedance
G54D	UA	A6DR	Barium, total	mg/L	12/03/15 - 10/25/23	23	0	CB around T-S line	0.0624	2.0	MCL/HBL	No Exceedance
G54D	UA	A7	Barium, total	mg/L	12/03/15 - 01/31/24	24	0	CB around T-S line	0.0607	2.0	MCL/HBL	No Exceedance
G54D	UA	A7R	Barium, total	mg/L	12/03/15 - 04/22/24	25	0	CB around T-S line	0.0584	2.0	MCL/HBL	No Exceedance
G54D	UA	A7D	Barium, total	mg/L	12/03/15 - 07/23/24	26	0	CB around T-S line	0.0528	2.0	MCL/HBL	No Exceedance
G54D	UA	A7DR	Barium, total	mg/L	12/03/15 - 10/22/24	27	0	CB around T-S line	0.0530	2.0	MCL/HBL	No Exceedance
G54D	UA	A6D	Beryllium, total	mg/L	12/03/15 - 09/26/23	17	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G54D	UA	A6DR	Beryllium, total	mg/L	12/03/15 - 10/25/23	18	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G54D	UA	A7	Beryllium, total	mg/L	12/03/15 - 01/31/24	19	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G54D	UA	A7R	Beryllium, total	mg/L	12/03/15 - 04/22/24	20	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G54D	UA	A7D	Beryllium, total	mg/L	12/03/15 - 07/23/24	21	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G54D	UA	A7DR	Beryllium, total	mg/L	12/03/15 - 10/22/24	22	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G54D	UA	A6D	Cadmium, total	mg/L	12/03/15 - 09/26/23	17	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G54D	UA	A6DR	Cadmium, total	mg/L	12/03/15 - 10/25/23	18	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G54D	UA	A7	Cadmium, total	mg/L	12/03/15 - 01/31/24	19	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G54D	UA	A7R	Cadmium, total	mg/L	12/03/15 - 04/22/24	20	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G54D	UA	A7D	Cadmium, total	mg/L	12/03/15 - 07/23/24	21	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G54D	UA	A7DR	Cadmium, total	mg/L	12/03/15 - 10/22/24	22	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G54D	UA	A6D	Chromium, total	mg/L	12/03/15 - 09/26/23	22	68	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G54D	UA	A6DR	Chromium, total	mg/L	12/03/15 - 10/25/23	23	65	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G54D	UA	A7	Chromium, total	mg/L	12/03/15 - 01/31/24	24	66	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G54D	UA	A7R	Chromium, total	mg/L	12/03/15 - 04/22/24	25	68	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G54D	UA	A7D	Chromium, total	mg/L	12/03/15 - 07/23/24	26	69	CI around median	0.00150	0.1	MCL/HBL	No Exceedance
G54D	UA	A7DR	Chromium, total	mg/L	12/03/15 - 10/22/24	27	70	CI around median	0.00150	0.1	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G54D	UA	A6D	Cobalt, total	mg/L	12/03/15 - 09/26/23	22	0	CB around linear reg	0.00315	0.0366	Background	No Exceedance
G54D	UA	A6DR	Cobalt, total	mg/L	12/03/15 - 10/25/23	23	0	CB around linear reg	0.00362	0.0366	Background	No Exceedance
G54D	UA	A7	Cobalt, total	mg/L	12/03/15 - 01/31/24	24	0	CB around linear reg	0.00382	0.0366	Background	No Exceedance
G54D	UA	A7R	Cobalt, total	mg/L	12/03/15 - 04/22/24	25	0	CB around linear reg	0.00391	0.0366	Background	No Exceedance
G54D	UA	A7D	Cobalt, total	mg/L	12/03/15 - 07/23/24	26	0	CB around linear reg	0.00390	0.0366	Background	No Exceedance
G54D	UA	A7DR	Cobalt, total	mg/L	12/03/15 - 10/22/24	27	0	CB around linear reg	0.00395	0.0366	Background	No Exceedance
G54D	UA	A6D	Fluoride, total	mg/L	12/03/15 - 09/26/23	23	0	CB around linear reg	0.258	4.0	MCL/HBL	No Exceedance
G54D	UA	A6DR	Fluoride, total	mg/L	12/03/15 - 10/25/23	24	0	CB around linear reg	0.262	4.0	MCL/HBL	No Exceedance
G54D	UA	A7	Fluoride, total	mg/L	12/03/15 - 01/31/24	25	0	CB around linear reg	0.259	4.0	MCL/HBL	No Exceedance
G54D	UA	A7R	Fluoride, total	mg/L	12/03/15 - 04/22/24	26	0	CB around linear reg	0.260	4.0	MCL/HBL	No Exceedance
G54D	UA	A7D	Fluoride, total	mg/L	12/03/15 - 07/23/24	27	0	CB around linear reg	0.263	4.0	MCL/HBL	No Exceedance
G54D	UA	A7DR	Fluoride, total	mg/L	12/03/15 - 10/22/24	28	3	CB around linear reg	0.258	4.0	MCL/HBL	No Exceedance
G54D	UA	A6D	Lead, total	mg/L	12/03/15 - 09/26/23	22	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G54D	UA	A6DR	Lead, total	mg/L	12/03/15 - 10/25/23	23	95	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G54D	UA	A7	Lead, total	mg/L	12/03/15 - 01/31/24	24	95	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G54D	UA	A7R	Lead, total	mg/L	12/03/15 - 04/22/24	25	96	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G54D	UA	A7D	Lead, total	mg/L	12/03/15 - 07/23/24	26	96	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G54D	UA	A7DR	Lead, total	mg/L	12/03/15 - 10/22/24	27	96	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
G54D	UA	A6D	Lithium, total	mg/L	12/03/15 - 09/26/23	22	18	CB around linear reg	0.00175	0.04	MCL/HBL	No Exceedance
G54D	UA	A6DR	Lithium, total	mg/L	12/03/15 - 10/25/23	23	17	CB around linear reg	0.00186	0.04	MCL/HBL	No Exceedance
G54D	UA	A7	Lithium, total	mg/L	12/03/15 - 01/31/24	24	16	CB around linear reg	0.00191	0.04	MCL/HBL	No Exceedance
G54D	UA	A7R	Lithium, total	mg/L	12/03/15 - 04/22/24	25	16	CB around linear reg	0.00190	0.04	MCL/HBL	No Exceedance
G54D	UA	A7D	Lithium, total	mg/L	12/03/15 - 07/23/24	26	19	CB around linear reg	0.00188	0.04	MCL/HBL	No Exceedance
G54D	UA	A7DR	Lithium, total	mg/L	12/03/15 - 10/22/24	27	18	CB around linear reg	0.00194	0.04	MCL/HBL	No Exceedance
G54D	UA	A6D	Mercury, total	mg/L	12/03/15 - 09/26/23	17	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G54D	UA	A6DR	Mercury, total	mg/L	12/03/15 - 10/25/23	18	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G54D	UA	A7	Mercury, total	mg/L	12/03/15 - 01/31/24	19	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

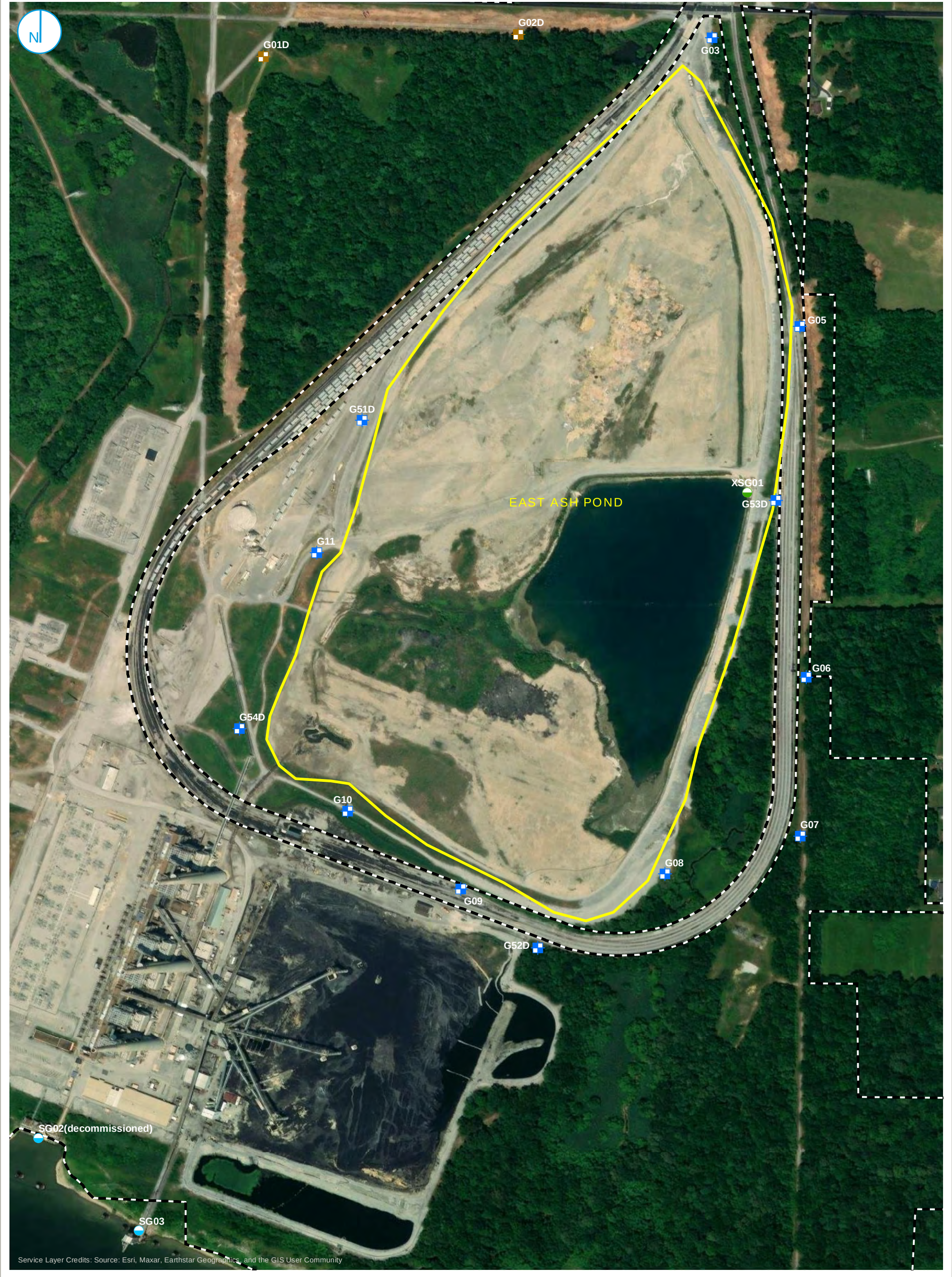
Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G54D	UA	A7R	Mercury, total	mg/L	12/03/15 - 04/22/24	20	95	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G54D	UA	A7D	Mercury, total	mg/L	12/03/15 - 07/23/24	21	95	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G54D	UA	A7DR	Mercury, total	mg/L	12/03/15 - 10/22/24	22	95	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
G54D	UA	A6D	Molybdenum, total	mg/L	12/03/15 - 09/26/23	18	94	CB around T-S line	0.00100	0.1	MCL/HBL	No Exceedance
G54D	UA	A6DR	Molybdenum, total	mg/L	12/03/15 - 10/25/23	19	94	CB around T-S line	0.00100	0.1	MCL/HBL	No Exceedance
G54D	UA	A7	Molybdenum, total	mg/L	12/03/15 - 01/31/24	20	95	CB around T-S line	0.00121	0.1	MCL/HBL	No Exceedance
G54D	UA	A7R	Molybdenum, total	mg/L	12/03/15 - 04/22/24	21	95	CB around T-S line	0.00142	0.1	MCL/HBL	No Exceedance
G54D	UA	A7D	Molybdenum, total	mg/L	12/03/15 - 07/23/24	22	95	CB around T-S line	0.00100	0.1	MCL/HBL	No Exceedance
G54D	UA	A7DR	Molybdenum, total	mg/L	12/03/15 - 10/22/24	23	95	CB around T-S line	0.00143	0.1	MCL/HBL	No Exceedance
G54D	UA	A6D	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 09/26/23	22	0	CI around geomean	0.493	5	MCL/HBL	No Exceedance
G54D	UA	A6DR	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 10/25/23	23	0	CI around geomean	0.513	5	MCL/HBL	No Exceedance
G54D	UA	A7	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 01/31/24	24	0	CI around geomean	0.517	5	MCL/HBL	No Exceedance
G54D	UA	A7R	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 04/22/24	25	0	CI around geomean	0.511	5	MCL/HBL	No Exceedance
G54D	UA	A7D	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 07/23/24	26	0	CI around geomean	0.508	5	MCL/HBL	No Exceedance
G54D	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	12/03/15 - 10/22/24	27	0	CI around geomean	0.504	5	MCL/HBL	No Exceedance
G54D	UA	A6D	Selenium, total	mg/L	12/03/15 - 09/26/23	22	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G54D	UA	A6DR	Selenium, total	mg/L	12/03/15 - 10/25/23	23	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G54D	UA	A7	Selenium, total	mg/L	12/03/15 - 01/31/24	24	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G54D	UA	A7R	Selenium, total	mg/L	12/03/15 - 04/22/24	25	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G54D	UA	A7D	Selenium, total	mg/L	12/03/15 - 07/23/24	26	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G54D	UA	A7DR	Selenium, total	mg/L	12/03/15 - 10/22/24	27	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G54D	UA	A6D	Thallium, total	mg/L	12/03/15 - 09/26/23	17	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G54D	UA	A6DR	Thallium, total	mg/L	12/03/15 - 10/25/23	18	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G54D	UA	A7	Thallium, total	mg/L	12/03/15 - 01/31/24	19	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G54D	UA	A7R	Thallium, total	mg/L	12/03/15 - 04/22/24	20	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G54D	UA	A7D	Thallium, total	mg/L	12/03/15 - 07/23/24	21	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G54D	UA	A7DR	Thallium, total	mg/L	12/03/15 - 10/22/24	22	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
EAST ASH POND
JOPPA, IL

Notes:
Event IDs:
 A6D = Quarter 3, 2023 Assessment Monitoring sampling event
 A6DR = Quarter 4, 2023 Assessment Monitoring resampling event
 A7 = Quarter 1, 2024 Assessment Monitoring sampling event
 A7R = Quarter 2, 2024 Assessment Monitoring resampling event
 A7D = Quarter 3, 2024 Assessment Monitoring sampling event
 A7DR = Quarter 4, 2024 Assessment Monitoring resampling event
HSU = hydrostratigraphic unit:
 UA = Uppermost Aquifer
ID = identification
ND = non-detect
mg/L = milligrams per liter
pCi/L = picocuries per liter
Statistically Significant Level (SSL) Type:
 No Exceedance: No exceedance of the GWPS.
GWPS = Groundwater Protection Standard
GWPS Source:
 Background = background concentration
 MCL/HBL = maximum contaminant level/health-based level
Sample Count = number of samples from Sampled Date Range used to calculate the Statistical Result
Statistical Calculation = method used to calculate the statistical result:
 All ND - Last = All results were below the reporting limit, and the last determined reporting limit is shown.
 CB around linear reg = Confidence band around linear regression
 CB around T-S line = Confidence band around Thiel-Sen line
 CI around geomean = Confidence interval around the geometric mean
 CI around mean = Confidence interval around the mean
 CI around median = Confidence interval around the median
 Most recent sample = Result for the most recently collected sample used due to insufficient data.
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

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FIGURES



- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- STAFF GAGE, CCR UNIT
- STAFF GAGE, RIVER
- REGULATED UNIT (SUBJECT UNIT)
- PROPERTY BOUNDARY

0 200 400
Feet

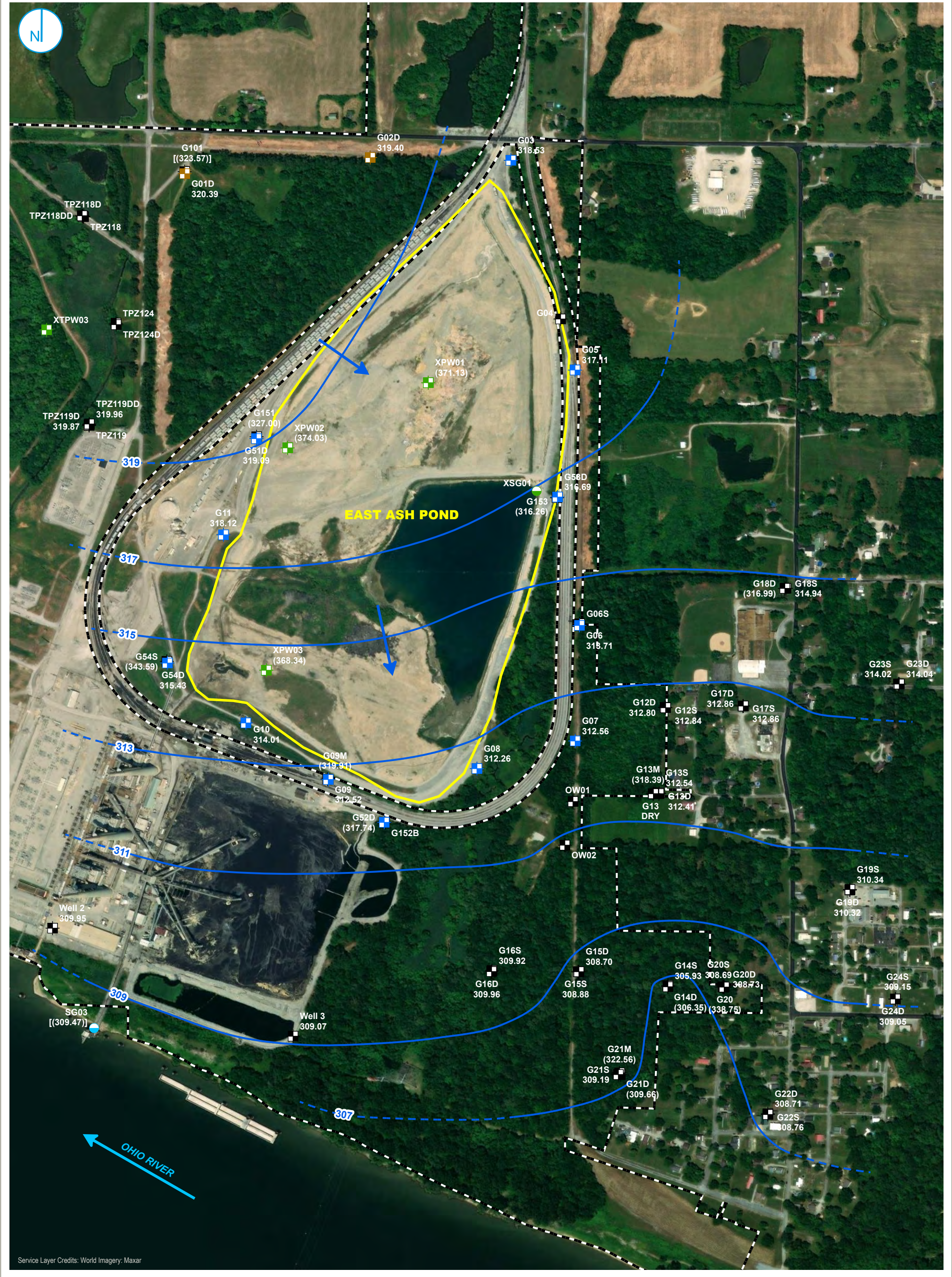
MONITORING WELL LOCATION MAP

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
EAST ASH POND
JOPPA POWER PLANT
JOPPA, ILLINOIS

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





COMPLIANCE MONITORING WELL

BACKGROUND MONITORING WELL

PORE WATER WELL

MONITORING WELL

STAFF GAGE, RIVER

STAFF GAGE, CCR UNIT

GROUNDWATER ELEVATION CONTOUR
(2-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

275

550

Feet

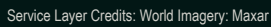
POTENTIOMETRIC SURFACE MAP
JANUARY 29, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
EAST ASH POND
JOPPA POWER PLANT
JOPPA, ILLINOIS

FIGURE 2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

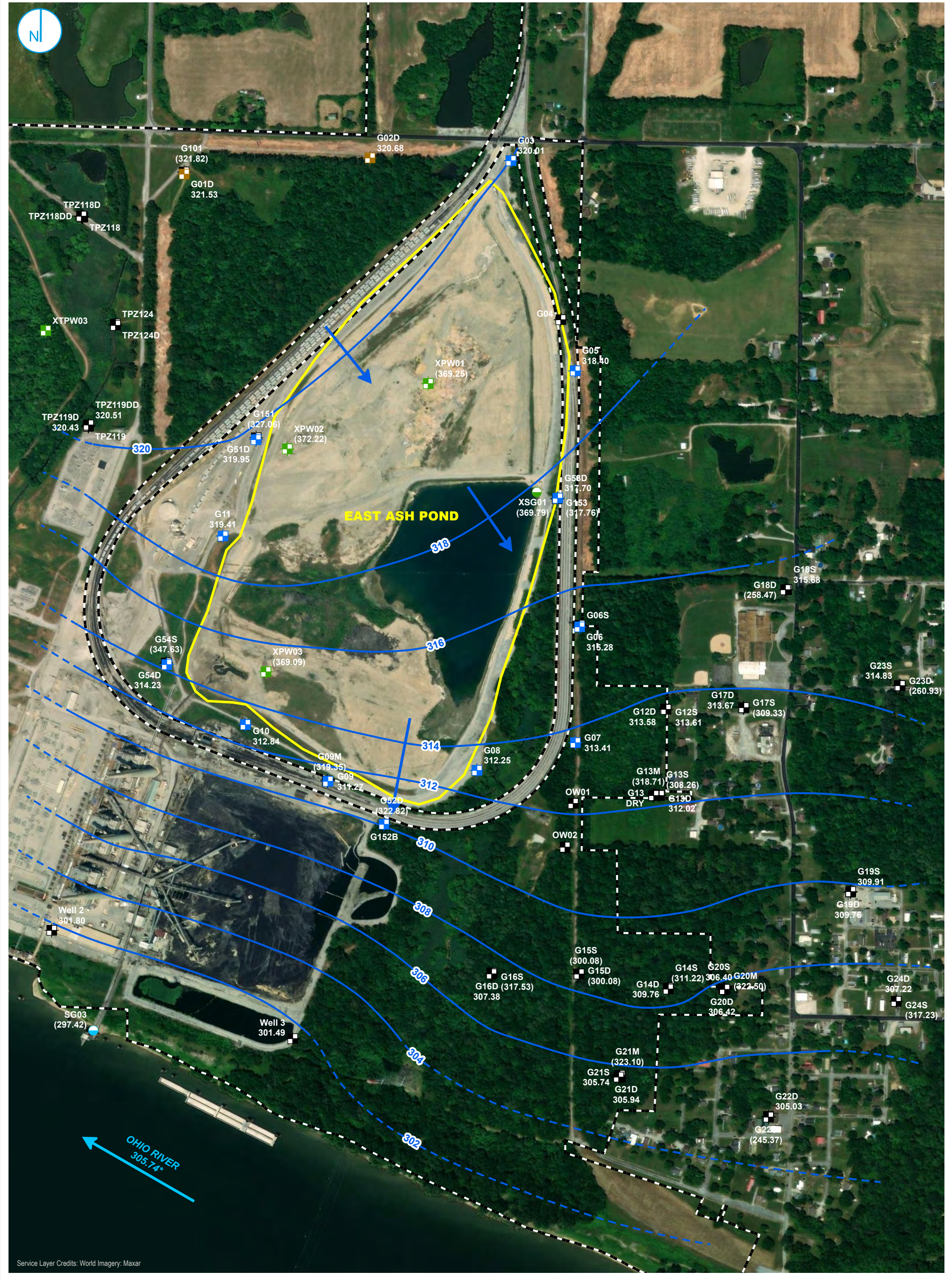


- NOTES**
1. ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
2. ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
- *GAGING DATA FROM USGS 03612600 OHIO RIVER AT OLMSTED, IL LOCATED APPROXIMATELY 12 MILES DOWNSTREAM OF JOPPA POWER PLANT.

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT EAST ASH POND JOPPA POWER PLANT JOPPA, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





COMPLIANCE MONITORING WELL

BACKGROUND MONITORING WELL

PORE WATER WELL

MONITORING WELL

STAFF GAGE, RIVER

STAFF GAGE, CCR UNIT

GROUNDWATER ELEVATION CONTOUR
(2-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)

*GAGING DATA FROM USGS 03612600 OHIO RIVER AT OLMSTED, IL LOCATED APPROXIMATELY 12 MILES DOWNSTREAM OF JOPPA POWER PLANT.

0

275

550

Feet

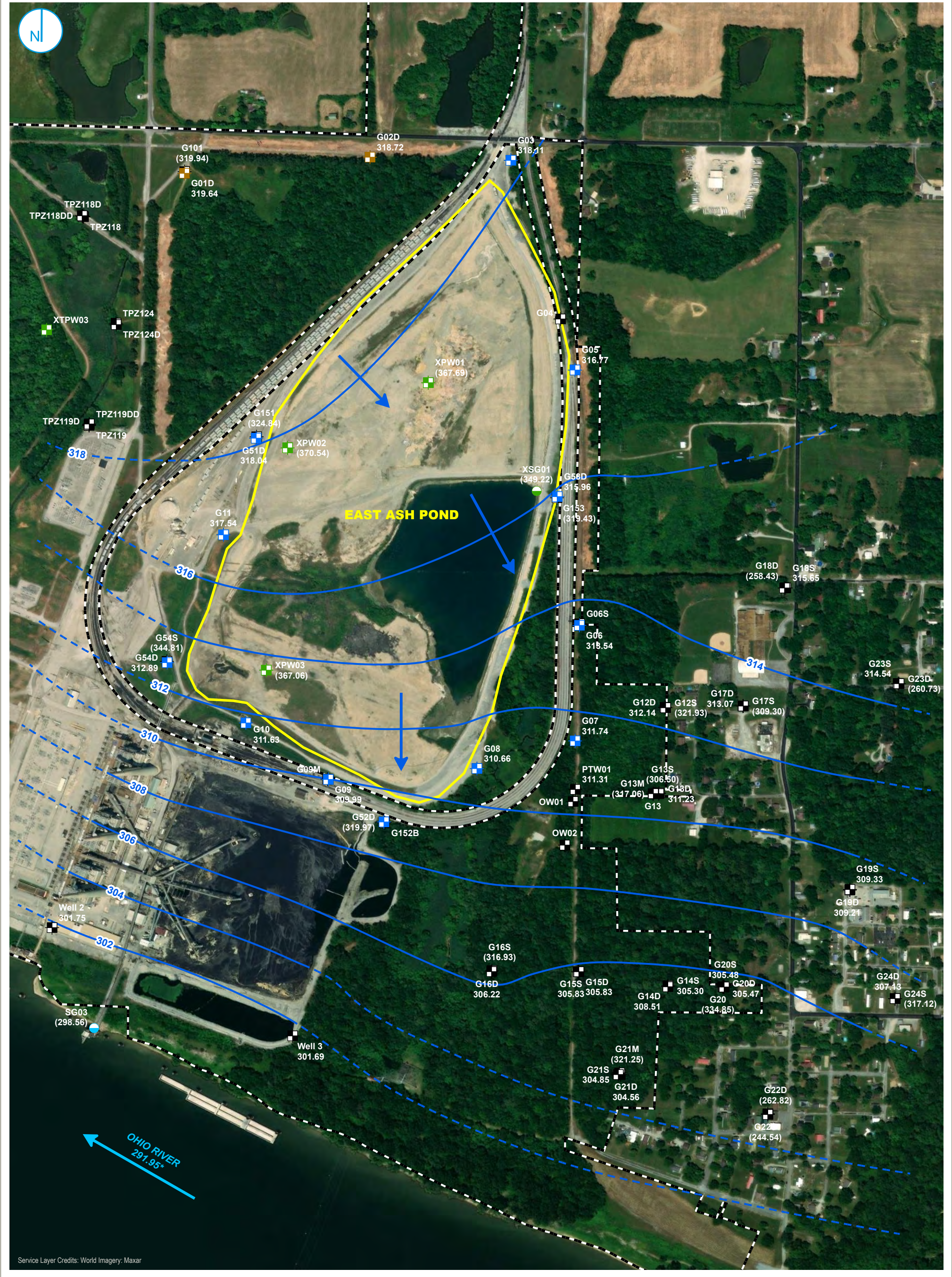
POTENTIOMETRIC SURFACE MAP
JULY 22, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
EAST ASH POND
JOPPA POWER PLANT
JOPPA, ILLINOIS

FIGURE 4

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL



COMPLIANCE MONITORING WELL

BACKGROUND MONITORING WELL

PORE WATER WELL

MONITORING WELL

STAFF GAGE, RIVER

STAFF GAGE, CCR UNIT

GROUNDWATER ELEVATION CONTOUR
(2-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)
*GAGING DATA FROM USGS 03612600 OHIO RIVER AT OLMSTED, IL LOCATED
APPROXIMATELY 12 MILES DOWNSTREAM OF JOPPA POWER PLANT.

0275550

Feet

POTENTIOMETRIC SURFACE MAP
OCTOBER 21, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
EAST ASH POND
JOPPA POWER PLANT
JOPPA, ILLINOIS

FIGURE 5

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

APPENDICES

APPENDIX A

LABORATORY REPORTS AND FIELD DATA SHEETS

February 20, 2024

Eric Bauer
Ramboll
234 W. Florida Street
Fifth Floor
Milwaukee, WI 53204
TEL: (414) 837-3607
FAX: (414) 837-3608



Illinois	100226
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: JOP-24Q1

WorkOrder: 24010966

Dear Eric Bauer:

TEKLAB, INC received 22 samples for JOP_257_401 on 2/1/2024 3:40:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Elizabeth A. Hurley
Director of Customer Service
(618)344-1004 ex 33
ehurley@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Sample Summary	44
Quality Control Results	45
Receiving Check List	73
Chain of Custody	Appended

Definitions

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

Abbr Definition

* Analytes on report marked with an asterisk are not NELAP accredited

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.

DNI Did not ignite

DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

TNTC Too numerous to count (> 200 CFU)

Definitions

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

Qualifiers

# - Unknown hydrocarbon	B - Analyte detected in associated Method Blank
C - RL shown is a Client Requested Quantitation Limit	E - Value above quantitation range
H - Holding times exceeded	I - Associated internal standard was outside method criteria
J - Analyte detected below quantitation limits	M - Manual Integration used to determine area response
ND - Not Detected at the Reporting Limit	R - RPD outside accepted recovery limits
S - Spike Recovery outside recovery limits	T - TIC(Tentatively identified compound)
X - Value exceeds Maximum Contaminant Level	



Case Narrative

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

Cooler Receipt Temp: 1.7 °C

An employee of Teklab, Inc. collected the sample(s).

XSG01 and YSG03 date/times of collection per SAR depth forms. Equipment Blanks 2 and 3 were not required due to sampling methods employed. EAH 2/2/24

Per Eric Bauer's request, only JOP_257_401 data is included in this report. EAH 2/20/24

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com



Accreditations

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2024	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2024	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-001
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24

Client Sample ID: G001D

Collection Date: 01/29/2024 13:12

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		44.51	ft	1	01/29/2024 13:12	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		17	NTU	1	01/29/2024 13:12	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		147	mV	1	01/29/2024 13:12	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		440	µS/cm	1	01/29/2024 13:12	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		15.0	°C	1	01/29/2024 13:12	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.10	mg/L	1	01/29/2024 13:12	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		6.45		1	01/29/2024 13:12	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		230	mg/L	1	02/01/2024 12:38	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/01/2024 12:38	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	80	100		350	mg/L	5	02/01/2024 10:31	R342567
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		34	mg/L	1	02/02/2024 10:51	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.17	mg/L	1	02/01/2024 15:24	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		16	mg/L	1	02/02/2024 10:51	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		39.2	mg/L	1	02/05/2024 16:21	218158
Magnesium	NELAP	0.0055	0.0500		11.7	mg/L	1	02/05/2024 16:21	218158
Potassium	NELAP	0.0400	0.100		2.06	mg/L	1	02/05/2024 16:21	218158
Sodium	NELAP	0.0180	0.0500		75.1	mg/L	1	02/05/2024 16:21	218158
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/05/2024 21:42	218158
Arsenic	NELAP	0.0004	0.0010		0.0057	mg/L	5	02/05/2024 21:42	218158
Barium	NELAP	0.0007	0.0010		0.289	mg/L	5	02/05/2024 21:42	218158
Beryllium	NELAP	0.0002	0.0010	J	0.0008	mg/L	5	02/05/2024 21:42	218158
Boron	NELAP	0.011	0.025	J	0.016	mg/L	5	02/06/2024 15:48	218158
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/05/2024 21:42	218158
Chromium	NELAP	0.0008	0.0015		0.0213	mg/L	5	02/05/2024 21:42	218158
Cobalt	NELAP	0.0001	0.0010		0.0172	mg/L	5	02/05/2024 21:42	218158
Lead	NELAP	0.0006	0.0010		0.0100	mg/L	5	02/05/2024 21:42	218158
Lithium	*	0.0015	0.0030		0.0058	mg/L	5	02/05/2024 21:42	218158
Molybdenum	NELAP	0.0006	0.0015	J	0.0015	mg/L	5	02/09/2024 15:01	218158
Selenium	NELAP	0.0006	0.0010	J	0.0009	mg/L	5	02/05/2024 21:42	218158
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/05/2024 21:42	218158



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-001
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: G001D
Collection Date: 01/29/2024 13:12

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	02/02/2024 9:10	218173



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-002
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24

Client Sample ID: G002D

Collection Date: 01/29/2024 13:59

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		44.33	ft	1	01/29/2024 13:59	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		3.0	NTU	1	01/29/2024 13:59	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		151	mV	1	01/29/2024 13:59	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		337	µS/cm	1	01/29/2024 13:59	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		13.8	°C	1	01/29/2024 13:59	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		2.34	mg/L	1	01/29/2024 13:59	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		6.42		1	01/29/2024 13:59	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		140	mg/L	1	02/01/2024 12:43	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/01/2024 12:43	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		230	mg/L	1	02/01/2024 10:32	R342567
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		15	mg/L	1	02/02/2024 10:59	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.19	mg/L	1	02/01/2024 15:26	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		22	mg/L	1	02/02/2024 10:59	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		37.0	mg/L	1	02/05/2024 16:22	218158
Magnesium	NELAP	0.0055	0.0500		10.3	mg/L	1	02/05/2024 16:22	218158
Potassium	NELAP	0.0400	0.100		1.11	mg/L	1	02/05/2024 16:22	218158
Sodium	NELAP	0.0180	0.0500		33.5	mg/L	1	02/05/2024 16:22	218158
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/05/2024 21:47	218158
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/05/2024 21:47	218158
Barium	NELAP	0.0007	0.0010		0.207	mg/L	5	02/05/2024 21:47	218158
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/05/2024 21:47	218158
Boron	NELAP	0.0108	0.0250		0.0323	mg/L	5	02/06/2024 15:53	218158
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/05/2024 21:47	218158
Chromium	NELAP	0.0008	0.0015	J	0.0010	mg/L	5	02/05/2024 21:47	218158
Cobalt	NELAP	0.0001	0.0010		< 0.0010	mg/L	5	02/05/2024 21:47	218158
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/05/2024 21:47	218158
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	02/05/2024 21:47	218158
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	02/05/2024 21:47	218158
Selenium	NELAP	0.0006	0.0010		0.0012	mg/L	5	02/05/2024 21:47	218158
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/05/2024 21:47	218158



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-002
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: G002D
Collection Date: 01/29/2024 13:59

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	02/02/2024 9:13	218173



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-003
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24

Client Sample ID: G003

Collection Date: 01/30/2024 10:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		37.95	ft	1	01/30/2024 10:05	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		340	NTU	1	01/30/2024 10:05	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		159	mV	1	01/30/2024 10:05	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		399	µS/cm	1	01/30/2024 10:05	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		14.2	°C	1	01/30/2024 10:05	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		3.90	mg/L	1	01/30/2024 10:05	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		6.28		1	01/30/2024 10:05	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		131	mg/L	1	02/01/2024 12:47	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/01/2024 12:47	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	80	100		290	mg/L	5	02/01/2024 10:32	R342567
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50		61	mg/L	5	02/05/2024 10:45	R342640
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.19	mg/L	1	02/01/2024 15:28	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		21	mg/L	1	02/02/2024 11:07	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100	S	44.6	mg/L	1	02/05/2024 16:24	218158
Magnesium	NELAP	0.0055	0.0500		14.4	mg/L	1	02/05/2024 16:24	218158
Potassium	NELAP	0.0400	0.100		1.34	mg/L	1	02/05/2024 16:24	218158
Sodium	NELAP	0.0180	0.0500		33.6	mg/L	1	02/05/2024 16:24	218158
<i>Matrix spike control limits are not applicable due to high sample/spike ratio.</i>									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/05/2024 23:24	218158
Arsenic	NELAP	0.0004	0.0010		0.0034	mg/L	5	02/05/2024 23:24	218158
Barium	NELAP	0.0007	0.0010		0.0733	mg/L	5	02/05/2024 23:24	218158
Beryllium	NELAP	0.0002	0.0010	J	0.0007	mg/L	5	02/05/2024 23:24	218158
Boron	NELAP	0.0108	0.0250		0.227	mg/L	5	02/06/2024 16:27	218158
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/05/2024 23:24	218158
Chromium	NELAP	0.0008	0.0015		0.0132	mg/L	5	02/05/2024 23:24	218158
Cobalt	NELAP	0.0001	0.0010		0.0065	mg/L	5	02/05/2024 23:24	218158
Lead	NELAP	0.0006	0.0010		0.0033	mg/L	5	02/05/2024 23:24	218158
Lithium	*	0.0015	0.0030	J	0.0027	mg/L	5	02/05/2024 23:24	218158
Molybdenum	NELAP	0.0006	0.0015	J	0.0012	mg/L	5	02/05/2024 23:24	218158
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/05/2024 23:24	218158
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/05/2024 23:24	218158



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-003
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: G003
Collection Date: 01/30/2024 10:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	02/02/2024 9:15	218173



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-004
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24

Client Sample ID: G005

Collection Date: 01/31/2024 12:12

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		43.95	ft	1	01/31/2024 12:12	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		10	NTU	1	01/31/2024 12:12	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		90	mV	1	01/31/2024 12:12	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		538	µS/cm	1	01/31/2024 12:12	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		15.4	°C	1	01/31/2024 12:12	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.29	mg/L	1	01/31/2024 12:12	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		6.41		1	01/31/2024 12:12	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		184	mg/L	1	02/01/2024 12:52	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/01/2024 12:52	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		365	mg/L	2.5	02/01/2024 10:32	R342567
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		101	mg/L	10	02/02/2024 11:37	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.35	mg/L	1	02/01/2024 15:29	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		21	mg/L	1	02/02/2024 11:31	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		53.9	mg/L	1	02/05/2024 16:29	218158
Magnesium	NELAP	0.0055	0.0500		18.6	mg/L	1	02/05/2024 16:29	218158
Potassium	NELAP	0.0400	0.100		1.82	mg/L	1	02/05/2024 16:29	218158
Sodium	NELAP	0.0180	0.0500		43.4	mg/L	1	02/05/2024 16:29	218158
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/05/2024 21:53	218158
Arsenic	NELAP	0.0004	0.0010		0.0014	mg/L	5	02/05/2024 21:53	218158
Barium	NELAP	0.0007	0.0010		0.189	mg/L	5	02/05/2024 21:53	218158
Beryllium	NELAP	0.0002	0.0010	J	0.0003	mg/L	5	02/05/2024 21:53	218158
Boron	NELAP	0.0108	0.0250		0.0453	mg/L	5	02/06/2024 15:59	218158
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/05/2024 21:53	218158
Chromium	NELAP	0.0008	0.0015		0.0084	mg/L	5	02/05/2024 21:53	218158
Cobalt	NELAP	0.0001	0.0010		0.0030	mg/L	5	02/05/2024 21:53	218158
Lead	NELAP	0.0006	0.0010		0.0033	mg/L	5	02/05/2024 21:53	218158
Lithium	*	0.0015	0.0030		0.0036	mg/L	5	02/05/2024 21:53	218158
Molybdenum	NELAP	0.0006	0.0015		0.0050	mg/L	5	02/05/2024 21:53	218158
Selenium	NELAP	0.0006	0.0010		0.0012	mg/L	5	02/06/2024 15:59	218158
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/05/2024 21:53	218158



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-004
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: G005
Collection Date: 01/31/2024 12:12

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	02/02/2024 9:17	218173



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-005
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24

Client Sample ID: G006

Collection Date: 01/30/2024 12:28

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		40.66	ft	1	01/30/2024 12:28	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		280	NTU	1	01/30/2024 12:28	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		150	mV	1	01/30/2024 12:28	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		573	µS/cm	1	01/30/2024 12:28	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		13.5	°C	1	01/30/2024 12:28	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.25	mg/L	1	01/30/2024 12:28	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		6.56		1	01/30/2024 12:28	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		132	mg/L	1	02/01/2024 12:56	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/01/2024 12:56	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	80	100		380	mg/L	5	02/01/2024 10:33	R342567
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		191	mg/L	10	02/02/2024 11:45	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.23	mg/L	1	02/01/2024 15:32	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		21	mg/L	1	02/02/2024 11:39	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		89.8	mg/L	1	02/05/2024 16:30	218158
Magnesium	NELAP	0.0055	0.0500		25.1	mg/L	1	02/05/2024 16:30	218158
Potassium	NELAP	0.0400	0.100		3.20	mg/L	1	02/05/2024 16:30	218158
Sodium	NELAP	0.0180	0.0500		44.4	mg/L	1	02/05/2024 16:30	218158
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	J	0.0005	mg/L	5	02/05/2024 21:59	218158
Arsenic	NELAP	0.0004	0.0010		0.0116	mg/L	5	02/05/2024 21:59	218158
Barium	NELAP	0.0007	0.0010		0.136	mg/L	5	02/05/2024 21:59	218158
Beryllium	NELAP	0.0002	0.0010		0.0017	mg/L	5	02/05/2024 21:59	218158
Boron	NELAP	0.0108	0.0250		2.47	mg/L	5	02/06/2024 16:04	218158
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/05/2024 21:59	218158
Chromium	NELAP	0.0008	0.0015		0.0488	mg/L	5	02/05/2024 21:59	218158
Cobalt	NELAP	0.0001	0.0010		0.0151	mg/L	5	02/05/2024 21:59	218158
Lead	NELAP	0.0006	0.0010		0.0160	mg/L	5	02/05/2024 21:59	218158
Lithium	*	0.0015	0.0030		0.0112	mg/L	5	02/05/2024 21:59	218158
Molybdenum	NELAP	0.0006	0.0015		0.0023	mg/L	5	02/05/2024 21:59	218158
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/05/2024 21:59	218158
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/05/2024 21:59	218158



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-005
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: G006
Collection Date: 01/30/2024 12:28

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	02/13/2024 11:39	218639



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-006
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24

Client Sample ID: G007

Collection Date: 01/30/2024 11:17

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		40.70	ft	1	01/30/2024 11:17	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		280	NTU	1	01/30/2024 11:17	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		156	mV	1	01/30/2024 11:17	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		710	µS/cm	1	01/30/2024 11:17	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		14.3	°C	1	01/30/2024 11:17	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.97	mg/L	1	01/30/2024 11:17	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		6.33		1	01/30/2024 11:17	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		165	mg/L	1	02/01/2024 13:01	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/01/2024 13:01	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	80	100		650	mg/L	5	02/01/2024 11:06	R342567
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		293	mg/L	10	02/02/2024 11:53	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.38	mg/L	1	02/01/2024 15:33	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		22	mg/L	1	02/02/2024 11:47	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		99.2	mg/L	1	02/05/2024 16:32	218158
Magnesium	NELAP	0.0055	0.0500		24.7	mg/L	1	02/05/2024 16:32	218158
Potassium	NELAP	0.0400	0.100		4.29	mg/L	1	02/05/2024 16:32	218158
Sodium	NELAP	0.0180	0.0500		66.9	mg/L	1	02/05/2024 16:32	218158
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/05/2024 22:45	218158
Arsenic	NELAP	0.0004	0.0010		0.0054	mg/L	5	02/05/2024 22:45	218158
Barium	NELAP	0.0007	0.0010		0.182	mg/L	5	02/05/2024 22:45	218158
Beryllium	NELAP	0.0002	0.0010	J	0.0010	mg/L	5	02/05/2024 22:45	218158
Boron	NELAP	0.0108	0.0250		3.93	mg/L	5	02/06/2024 16:10	218158
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/05/2024 22:45	218158
Chromium	NELAP	0.0008	0.0015		0.0284	mg/L	5	02/05/2024 22:45	218158
Cobalt	NELAP	0.0001	0.0010		0.0052	mg/L	5	02/07/2024 21:38	218158
Lead	NELAP	0.0006	0.0010		0.0054	mg/L	5	02/05/2024 22:45	218158
Lithium	*	0.0015	0.0030		0.0063	mg/L	5	02/05/2024 22:45	218158
Molybdenum	NELAP	0.0006	0.0015		0.0019	mg/L	5	02/09/2024 15:06	218158
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/05/2024 22:45	218158
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/05/2024 22:45	218158



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-006
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: G007
Collection Date: 01/30/2024 11:17

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	02/02/2024 9:27	218173



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-007
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24

Client Sample ID: G008
Collection Date: 01/30/2024 14:06

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		30.82	ft	1	01/30/2024 14:06	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		160	NTU	1	01/30/2024 14:06	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		137	mV	1	01/30/2024 14:06	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		735	µS/cm	1	01/30/2024 14:06	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		14.6	°C	1	01/30/2024 14:06	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.77	mg/L	1	01/30/2024 14:06	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		6.94		1	01/30/2024 14:06	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		166	mg/L	1	02/01/2024 13:06	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/01/2024 13:06	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	80	100		670	mg/L	5	02/01/2024 11:06	R342567
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		334	mg/L	10	02/02/2024 12:00	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.26	mg/L	1	02/01/2024 15:44	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		14	mg/L	1	02/02/2024 11:55	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		134	mg/L	1	02/05/2024 16:34	218158
Magnesium	NELAP	0.0055	0.0500		32.7	mg/L	1	02/05/2024 16:34	218158
Potassium	NELAP	0.0400	0.100		1.86	mg/L	1	02/05/2024 16:34	218158
Sodium	NELAP	0.0180	0.0500		39.2	mg/L	1	02/05/2024 16:34	218158
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/05/2024 22:50	218158
Arsenic	NELAP	0.0004	0.0010		0.0183	mg/L	5	02/05/2024 22:50	218158
Barium	NELAP	0.0007	0.0010		0.142	mg/L	5	02/05/2024 22:50	218158
Beryllium	NELAP	0.0002	0.0010	J	0.0007	mg/L	5	02/05/2024 22:50	218158
Boron	NELAP	0.0108	0.0250		4.61	mg/L	5	02/06/2024 16:16	218158
Cadmium	NELAP	0.0002	0.0010	J	0.0010	mg/L	5	02/05/2024 22:50	218158
Chromium	NELAP	0.0008	0.0015		0.0153	mg/L	5	02/05/2024 22:50	218158
Cobalt	NELAP	0.0001	0.0010		0.0126	mg/L	5	02/05/2024 22:50	218158
Lead	NELAP	0.0006	0.0010		0.0051	mg/L	5	02/05/2024 22:50	218158
Lithium	*	0.0015	0.0030		0.0041	mg/L	5	02/05/2024 22:50	218158
Molybdenum	NELAP	0.0006	0.0015		0.0029	mg/L	5	02/05/2024 22:50	218158
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/05/2024 22:50	218158
Thallium	NELAP	0.0010	0.0020	J	0.0013	mg/L	5	02/05/2024 22:50	218158



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-007
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: G008
Collection Date: 01/30/2024 14:06

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	02/02/2024 9:35	218173



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-008
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24

Client Sample ID: G009

Collection Date: 02/01/2024 10:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		37.64	ft	1	02/01/2024 10:35	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		350	NTU	1	02/01/2024 10:35	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		161	mV	1	02/01/2024 10:35	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		594	µS/cm	1	02/01/2024 10:35	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		16.0	°C	1	02/01/2024 10:35	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		2.48	mg/L	1	02/01/2024 10:35	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		6.03		1	02/01/2024 10:35	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		109	mg/L	1	02/02/2024 12:57	R342573
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/02/2024 12:57	R342573
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	80	100		580	mg/L	5	02/02/2024 12:23	R342621
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		234	mg/L	10	02/05/2024 12:50	R342640
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.25	mg/L	1	02/02/2024 13:15	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		17	mg/L	1	02/05/2024 12:45	R342647
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		60.8	mg/L	1	02/05/2024 10:05	218215
Magnesium	NELAP	0.0055	0.0500		25.1	mg/L	1	02/05/2024 10:05	218215
Potassium	NELAP	0.0400	0.100		1.30	mg/L	1	02/05/2024 8:44	218215
Sodium	NELAP	0.0180	0.0500		55.1	mg/L	1	02/05/2024 8:44	218215
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	J	0.0007	mg/L	5	02/05/2024 20:10	218215
Arsenic	NELAP	0.0004	0.0010		0.0140	mg/L	5	02/05/2024 20:10	218215
Barium	NELAP	0.0007	0.0010		0.0942	mg/L	5	02/05/2024 20:10	218215
Beryllium	NELAP	0.0002	0.0010		0.0033	mg/L	5	02/05/2024 20:10	218215
Boron	NELAP	0.0092	0.0250		2.95	mg/L	5	02/06/2024 13:13	218215
Cadmium	NELAP	0.0002	0.0010	J	0.0003	mg/L	5	02/05/2024 20:10	218215
Chromium	NELAP	0.0008	0.0015		0.0298	mg/L	5	02/05/2024 20:10	218215
Cobalt	NELAP	0.0001	0.0010		0.0092	mg/L	5	02/05/2024 20:10	218215
Lead	NELAP	0.0006	0.0010		0.0084	mg/L	5	02/05/2024 20:10	218215
Lithium	*	0.0015	0.0030		0.0059	mg/L	5	02/05/2024 20:10	218215
Molybdenum	NELAP	0.0006	0.0015	J	0.0013	mg/L	5	02/05/2024 20:10	218215
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/05/2024 20:10	218215
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/05/2024 20:10	218215



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-008
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: G009
Collection Date: 02/01/2024 10:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	02/05/2024 15:28	218217



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-009
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24

Client Sample ID: G010

Collection Date: 01/30/2024 15:07

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		38.75	ft	1	01/30/2024 15:07	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		310	NTU	1	01/30/2024 15:07	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		158	mV	1	01/30/2024 15:07	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		816	µS/cm	1	01/30/2024 15:07	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		14.1	°C	1	01/30/2024 15:07	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		2.23	mg/L	1	01/30/2024 15:07	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		6.37		1	01/30/2024 15:07	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		255	mg/L	1	02/01/2024 13:12	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/01/2024 13:12	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	80	100		780	mg/L	5	02/01/2024 11:07	R342567
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		272	mg/L	10	02/02/2024 12:08	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.87	mg/L	1	02/01/2024 15:46	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		21	mg/L	1	02/02/2024 12:03	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		102	mg/L	1	02/05/2024 16:43	218158
Magnesium	NELAP	0.0055	0.0500		32.5	mg/L	1	02/05/2024 16:43	218158
Potassium	NELAP	0.400	1.00		14.5	mg/L	10	02/06/2024 10:35	218158
Sodium	NELAP	0.0180	0.0500		85.0	mg/L	1	02/05/2024 16:43	218158
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/05/2024 22:56	218158
Arsenic	NELAP	0.0004	0.0010		0.0156	mg/L	5	02/05/2024 22:56	218158
Barium	NELAP	0.0007	0.0010		0.128	mg/L	5	02/05/2024 22:56	218158
Beryllium	NELAP	0.0002	0.0010		0.0025	mg/L	5	02/05/2024 22:56	218158
Boron	NELAP	0.0108	0.0250		1.16	mg/L	5	02/06/2024 16:21	218158
Cadmium	NELAP	0.0002	0.0010	J	0.0002	mg/L	5	02/05/2024 22:56	218158
Chromium	NELAP	0.0008	0.0015		0.0511	mg/L	5	02/05/2024 22:56	218158
Cobalt	NELAP	0.0001	0.0010		0.0114	mg/L	5	02/05/2024 22:56	218158
Lead	NELAP	0.0006	0.0010		0.0102	mg/L	5	02/05/2024 22:56	218158
Lithium	*	0.0015	0.0030		0.0256	mg/L	5	02/05/2024 22:56	218158
Molybdenum	NELAP	0.0006	0.0015		0.0062	mg/L	5	02/09/2024 15:12	218158
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/05/2024 22:56	218158
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/05/2024 22:56	218158



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-009
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: G010
Collection Date: 01/30/2024 15:07

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	02/02/2024 9:38	218173



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-010
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24

Client Sample ID: G011

Collection Date: 01/30/2024 14:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		47.38	ft	1	01/30/2024 14:08	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		180	NTU	1	01/30/2024 14:08	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		127	mV	1	01/30/2024 14:08	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		558	µS/cm	1	01/30/2024 14:08	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		15.6	°C	1	01/30/2024 14:08	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.38	mg/L	1	01/30/2024 14:08	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		5.97		1	01/30/2024 14:08	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		94	mg/L	1	02/01/2024 13:16	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/01/2024 13:16	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		400	mg/L	2.5	02/01/2024 11:07	R342567
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		176	mg/L	10	02/02/2024 12:33	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.18	mg/L	1	02/01/2024 15:48	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		25	mg/L	1	02/02/2024 12:27	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		61.9	mg/L	1	02/05/2024 16:44	218158
Magnesium	NELAP	0.0055	0.0500		20.3	mg/L	1	02/05/2024 16:44	218158
Potassium	NELAP	0.0400	0.100		1.78	mg/L	1	02/05/2024 16:44	218158
Sodium	NELAP	0.0180	0.0500		44.6	mg/L	1	02/05/2024 16:44	218158
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/05/2024 23:02	218158
Arsenic	NELAP	0.0004	0.0010		0.0016	mg/L	5	02/05/2024 23:02	218158
Barium	NELAP	0.0007	0.0010		0.0656	mg/L	5	02/05/2024 23:02	218158
Beryllium	NELAP	0.0002	0.0010	J	0.0003	mg/L	5	02/05/2024 23:02	218158
Boron	NELAP	0.0108	0.0250		0.243	mg/L	5	02/06/2024 17:08	218158
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/05/2024 23:02	218158
Chromium	NELAP	0.0008	0.0015		0.0066	mg/L	5	02/05/2024 23:02	218158
Cobalt	NELAP	0.0001	0.0010		0.0078	mg/L	5	02/05/2024 23:02	218158
Lead	NELAP	0.0006	0.0010		0.0015	mg/L	5	02/05/2024 23:02	218158
Lithium	*	0.0015	0.0030		0.0040	mg/L	5	02/05/2024 23:02	218158
Molybdenum	NELAP	0.0006	0.0015	J	0.0009	mg/L	5	02/05/2024 23:02	218158
Selenium	NELAP	0.0006	0.0010		0.0017	mg/L	5	02/05/2024 23:02	218158
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/05/2024 23:02	218158



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-010
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: G011
Collection Date: 01/30/2024 14:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00009	0.00020		< 0.00020	mg/L	1	02/02/2024 10:35	218175



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-027
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24

Client Sample ID: G051D

Collection Date: 01/30/2024 11:12

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		44.36	ft	1	01/30/2024 11:12	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		54	NTU	1	01/30/2024 11:12	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		188	mV	1	01/30/2024 11:12	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		341	µS/cm	1	01/30/2024 11:12	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		15.6	°C	1	01/30/2024 11:12	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		3.54	mg/L	1	01/30/2024 11:12	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		5.49		1	01/30/2024 11:12	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		50	mg/L	1	02/01/2024 13:43	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/01/2024 13:43	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		325	mg/L	2.5	02/01/2024 11:21	R342567
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		121	mg/L	10	02/02/2024 14:56	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10	J	0.08	mg/L	1	02/02/2024 11:26	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		4	mg/L	1	02/02/2024 14:51	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		28.3	mg/L	1	02/02/2024 9:52	218159
Magnesium	NELAP	0.0055	0.0500		12.1	mg/L	1	02/02/2024 9:52	218159
Potassium	NELAP	0.0400	0.100		0.414	mg/L	1	02/02/2024 9:52	218159
Sodium	NELAP	0.0180	0.0500	S	33.0	mg/L	1	02/02/2024 9:52	218159
<i>Matrix spike control limits are not applicable due to high sample/spike ratio.</i>									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/06/2024 19:13	218159
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/06/2024 19:13	218159
Barium	NELAP	0.0007	0.0010		0.0346	mg/L	5	02/06/2024 19:13	218159
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/06/2024 19:13	218159
Boron	NELAP	0.0092	0.0250		0.704	mg/L	5	02/06/2024 19:13	218159
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/06/2024 19:13	218159
Chromium	NELAP	0.0007	0.0015		0.0021	mg/L	5	02/07/2024 23:15	218159
Cobalt	NELAP	0.0001	0.0010		0.0012	mg/L	5	02/08/2024 18:33	218159
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/06/2024 19:13	218159
Lithium	*	0.0015	0.0030		0.0054	mg/L	5	02/06/2024 19:13	218159
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	02/09/2024 17:04	218159
Selenium	NELAP	0.0006	0.0010		0.0049	mg/L	5	02/06/2024 19:13	218159
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/06/2024 19:13	218159



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-027
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: G051D
Collection Date: 01/30/2024 11:12

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00009	0.00020		< 0.00020	mg/L	1	02/02/2024 11:19	218175



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-028
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24

Client Sample ID: G052D

Collection Date: 01/31/2024 9:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		29.74	ft	1	01/31/2024 9:08	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		2.5	NTU	1	01/31/2024 9:08	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		-56	mV	1	01/31/2024 9:08	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		368	µS/cm	1	01/31/2024 9:08	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		11.8	°C	1	01/31/2024 9:08	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.51	mg/L	1	01/31/2024 9:08	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		6.30		1	01/31/2024 9:08	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		151	mg/L	1	02/01/2024 10:59	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/01/2024 10:59	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		296	mg/L	1	02/02/2024 10:58	R342621
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		45	mg/L	1	02/02/2024 15:15	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.25	mg/L	1	02/02/2024 12:27	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		11	mg/L	1	02/02/2024 15:15	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		43.0	mg/L	1	02/02/2024 9:57	218159
Magnesium	NELAP	0.0055	0.0500		13.8	mg/L	1	02/02/2024 9:57	218159
Potassium	NELAP	0.0400	0.100		0.666	mg/L	1	02/02/2024 9:57	218159
Sodium	NELAP	0.0180	0.0500		25.9	mg/L	1	02/02/2024 9:57	218159
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/06/2024 2:46	218159
Arsenic	NELAP	0.0004	0.0010		0.0013	mg/L	5	02/06/2024 2:46	218159
Barium	NELAP	0.0007	0.0010		0.213	mg/L	5	02/06/2024 2:46	218159
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/06/2024 2:46	218159
Boron	NELAP	0.0092	0.025	J	0.019	mg/L	5	02/06/2024 2:46	218159
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/06/2024 2:46	218159
Chromium	NELAP	0.0008	0.0015		< 0.0015	mg/L	5	02/06/2024 2:46	218159
Cobalt	NELAP	0.0001	0.0010		0.0034	mg/L	5	02/06/2024 2:46	218159
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/06/2024 2:46	218159
Lithium	*	0.0015	0.0030	J	0.0024	mg/L	5	02/06/2024 2:46	218159
Molybdenum	NELAP	0.0006	0.0015	J	0.0008	mg/L	5	02/06/2024 2:46	218159
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/06/2024 2:46	218159
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/06/2024 19:59	218159



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-028
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: G052D
Collection Date: 01/31/2024 9:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00009	0.00020		< 0.00020	mg/L	1	02/02/2024 11:40	218175



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-029
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24

Client Sample ID: G053D

Collection Date: 01/30/2024 12:52

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		38.46	ft	1	01/30/2024 12:52	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		7.1	NTU	1	01/30/2024 12:52	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		150	mV	1	01/30/2024 12:52	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		396	µS/cm	1	01/30/2024 12:52	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		15.0	°C	1	01/30/2024 12:52	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.78	mg/L	1	01/30/2024 12:52	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		6.49		1	01/30/2024 12:52	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		164	mg/L	1	02/01/2024 13:46	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/01/2024 13:46	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		325	mg/L	2.5	02/01/2024 11:42	R342567
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50		70	mg/L	5	02/05/2024 10:56	R342640
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.65	mg/L	1	02/02/2024 11:29	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		18	mg/L	1	02/02/2024 15:23	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		37.5	mg/L	1	02/02/2024 9:59	218159
Magnesium	NELAP	0.0055	0.0500		16.6	mg/L	1	02/02/2024 9:59	218159
Potassium	NELAP	0.0400	0.100		0.418	mg/L	1	02/02/2024 9:59	218159
Sodium	NELAP	0.0180	0.0500		48.3	mg/L	1	02/02/2024 9:59	218159
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/06/2024 2:52	218159
Arsenic	NELAP	0.0004	0.0010	J	0.0008	mg/L	5	02/06/2024 2:52	218159
Barium	NELAP	0.0007	0.0010		0.110	mg/L	5	02/06/2024 2:52	218159
Beryllium	NELAP	0.0002	0.0010	J	0.0003	mg/L	5	02/06/2024 2:52	218159
Boron	NELAP	0.0092	0.0250		0.427	mg/L	5	02/06/2024 2:52	218159
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/06/2024 2:52	218159
Chromium	NELAP	0.0007	0.0015		0.0025	mg/L	5	02/07/2024 23:04	218159
Cobalt	NELAP	0.0001	0.0010		0.0028	mg/L	5	02/06/2024 2:52	218159
Lead	NELAP	0.0006	0.0010	J	0.0008	mg/L	5	02/06/2024 2:52	218159
Lithium	*	0.0015	0.0030	J	0.0019	mg/L	5	02/06/2024 2:52	218159
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	02/06/2024 2:52	218159
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/06/2024 2:52	218159
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/06/2024 20:05	218159



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-029
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: G053D
Collection Date: 01/30/2024 12:52

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00009	0.00020		< 0.00020	mg/L	1	02/02/2024 11:43	218175



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-030
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24

Client Sample ID: G054D
Collection Date: 01/31/2024 11:11

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		39.58	ft	1	01/31/2024 11:11	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		6.9	NTU	1	01/31/2024 11:11	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		18	mV	1	01/31/2024 11:11	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		688	µS/cm	1	01/31/2024 11:11	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		14.7	°C	1	01/31/2024 11:11	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.73	mg/L	1	01/31/2024 11:11	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		6.48		1	01/31/2024 11:11	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		211	mg/L	1	02/01/2024 11:03	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/01/2024 11:03	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		530	mg/L	2.5	02/02/2024 11:10	R342621
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		197	mg/L	10	02/02/2024 15:36	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.27	mg/L	1	02/02/2024 12:29	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		21	mg/L	1	02/02/2024 15:31	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		93.3	mg/L	1	02/02/2024 10:00	218159
Magnesium	NELAP	0.0055	0.0500		28.9	mg/L	1	02/02/2024 10:00	218159
Potassium	NELAP	0.0400	0.100		1.29	mg/L	1	02/02/2024 10:00	218159
Sodium	NELAP	0.0180	0.0500		49.7	mg/L	1	02/02/2024 10:00	218159
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/06/2024 2:58	218159
Arsenic	NELAP	0.0004	0.0010	J	0.0007	mg/L	5	02/06/2024 2:58	218159
Barium	NELAP	0.0007	0.0010		0.0704	mg/L	5	02/06/2024 2:58	218159
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/06/2024 2:58	218159
Boron	NELAP	0.0092	0.0250		0.804	mg/L	5	02/06/2024 2:58	218159
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/06/2024 2:58	218159
Chromium	NELAP	0.0008	0.0015	J	0.0011	mg/L	5	02/06/2024 2:58	218159
Cobalt	NELAP	0.0001	0.0010		0.0104	mg/L	5	02/06/2024 2:58	218159
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/06/2024 2:58	218159
Lithium	*	0.0015	0.0030		0.0037	mg/L	5	02/06/2024 2:58	218159
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	02/06/2024 2:58	218159
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/06/2024 2:58	218159
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/06/2024 20:10	218159



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-030
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: G054D
Collection Date: 01/31/2024 11:11

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00009	0.00020		< 0.00020	mg/L	1	02/02/2024 11:45	218175



Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

Lab ID: 24010966-037

Client Sample ID: XPW01_pore

Matrix: GROUNDWATER

Collection Date: 01/30/2024 12:14

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		4.8	NTU	1	01/30/2024 12:14	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		-31	mV	1	01/30/2024 12:14	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		800	µS/cm	1	01/30/2024 12:14	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		16.1	°C	1	01/30/2024 12:14	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.43	mg/L	1	01/30/2024 12:14	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		8.44		1	01/30/2024 12:14	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		103	mg/L	1	02/01/2024 13:50	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		20	mg/L	1	02/01/2024 13:50	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		715	mg/L	2.5	02/01/2024 11:43	R342567
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		359	mg/L	10	02/02/2024 17:01	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.27	mg/L	1	02/02/2024 11:31	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		19	mg/L	1	02/02/2024 16:43	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		169	mg/L	1	02/02/2024 12:07	218159
Magnesium	NELAP	0.0055	0.0500		0.414	mg/L	1	02/02/2024 12:07	218159
Potassium	NELAP	0.400	1.00		37.3	mg/L	10	02/05/2024 13:24	218159
Sodium	NELAP	0.0180	0.0500		26.9	mg/L	1	02/02/2024 12:07	218159
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/06/2024 4:12	218159
Arsenic	NELAP	0.0004	0.0010		0.0292	mg/L	5	02/06/2024 4:12	218159
Barium	NELAP	0.0007	0.0010		0.114	mg/L	5	02/06/2024 4:12	218159
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/06/2024 4:12	218159
Boron	NELAP	0.0092	0.0250		10.3	mg/L	5	02/06/2024 4:12	218159
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/06/2024 4:12	218159
Chromium	NELAP	0.0008	0.0015	J	0.0011	mg/L	5	02/06/2024 4:12	218159
Cobalt	NELAP	0.0001	0.0010	J	0.0002	mg/L	5	02/06/2024 4:12	218159
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/06/2024 4:12	218159
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	02/06/2024 4:12	218159
Molybdenum	NELAP	0.0006	0.0015		0.291	mg/L	5	02/06/2024 4:12	218159
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/06/2024 4:12	218159
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/06/2024 20:44	218159
<i>Sample result(s) exceed 10 times the CCB. Data is reportable per the TNI Standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00009	0.00020		< 0.00020	mg/L	1	02/02/2024 11:47	218175



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-038
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24

Client Sample ID: XPW02_pore
Collection Date: 01/29/2024 14:51

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		13	NTU	1	01/29/2024 14:51	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		-55	mV	1	01/29/2024 14:51	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		4120	µS/cm	1	01/29/2024 14:51	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		15.3	°C	1	01/29/2024 14:51	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.48	mg/L	1	01/29/2024 14:51	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		7.72		1	01/29/2024 14:51	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		121	mg/L	1	02/01/2024 11:30	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/01/2024 11:30	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		4460	mg/L	2.5	02/01/2024 13:17	R342567
SW-846 9036 (TOTAL)									
Sulfate	NELAP	614	1000		2760	mg/L	100	02/05/2024 11:15	R342640
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.74	mg/L	1	02/02/2024 11:33	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	5	40		104	mg/L	10	02/02/2024 17:17	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		467	mg/L	1	02/02/2024 12:08	218159
Magnesium	NELAP	0.0055	0.0500		7.83	mg/L	1	02/02/2024 12:08	218159
Potassium	NELAP	0.400	1.00		26.0	mg/L	10	02/05/2024 13:26	218159
Sodium	NELAP	0.180	0.500		909	mg/L	10	02/05/2024 13:26	218159
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/06/2024 4:18	218159
Arsenic	NELAP	0.0004	0.0010		0.0482	mg/L	5	02/06/2024 4:18	218159
Barium	NELAP	0.0007	0.0010		0.0272	mg/L	5	02/06/2024 4:18	218159
Beryllium	NELAP	0.0002	0.0010	J	0.0004	mg/L	5	02/06/2024 4:18	218159
Boron	NELAP	0.0092	0.0250		17.1	mg/L	5	02/06/2024 4:18	218159
Cadmium	NELAP	0.0002	0.0010	J	0.0005	mg/L	5	02/06/2024 4:18	218159
Chromium	NELAP	0.0008	0.0015		0.0020	mg/L	5	02/06/2024 4:18	218159
Cobalt	NELAP	0.0001	0.0010	J	0.0006	mg/L	5	02/06/2024 4:18	218159
Lead	NELAP	0.0006	0.0010		0.0019	mg/L	5	02/06/2024 4:18	218159
Lithium	*	0.0015	0.0030		0.0770	mg/L	5	02/06/2024 4:18	218159
Molybdenum	NELAP	0.0024	0.0060		1.48	mg/L	20	02/09/2024 16:32	218159
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/06/2024 4:18	218159
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/06/2024 21:55	218159
<i>Sample result(s) exceed 10 times the CCB. Data is reportable per the TNI Standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00009	0.00020		< 0.00020	mg/L	1	02/02/2024 11:50	218175



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-039
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: XPW03_pore
Collection Date: 01/30/2024 13:02

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		2.4	NTU	1	01/30/2024 13:02	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		2	mV	1	01/30/2024 13:02	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		584	µS/cm	1	01/30/2024 13:02	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		16.3	°C	1	01/30/2024 13:02	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.87	mg/L	1	01/30/2024 13:02	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		10.8		1	01/30/2024 13:02	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/01/2024 13:56	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		76	mg/L	1	02/01/2024 13:56	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		394	mg/L	1	02/01/2024 11:43	R342567
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		142	mg/L	10	02/02/2024 17:33	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.28	mg/L	1	02/02/2024 11:35	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		25	mg/L	1	02/02/2024 17:28	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		11.0	mg/L	1	02/02/2024 12:10	218159
Magnesium	NELAP	0.0055	0.050	J	0.0062	mg/L	1	02/02/2024 12:10	218159
Potassium	NELAP	0.400	1.00		25.8	mg/L	10	02/05/2024 13:27	218159
Sodium	NELAP	0.0180	0.0500		97.4	mg/L	1	02/02/2024 12:10	218159
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		0.0090	mg/L	5	02/06/2024 4:24	218159
Arsenic	NELAP	0.0004	0.0010		0.502	mg/L	5	02/06/2024 4:24	218159
Barium	NELAP	0.0007	0.0010		0.0101	mg/L	5	02/06/2024 4:24	218159
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/06/2024 4:24	218159
Boron	NELAP	0.0092	0.0250		7.97	mg/L	5	02/06/2024 4:24	218159
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/06/2024 4:24	218159
Chromium	NELAP	0.0008	0.0015	J	0.0010	mg/L	5	02/06/2024 4:24	218159
Cobalt	NELAP	0.0001	0.0010		< 0.0010	mg/L	5	02/06/2024 4:24	218159
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/06/2024 4:24	218159
Lithium	*	0.0015	0.0030		0.152	mg/L	5	02/06/2024 4:24	218159
Molybdenum	NELAP	0.0006	0.0015		0.235	mg/L	5	02/06/2024 4:24	218159
Selenium	NELAP	0.0006	0.0010		0.0308	mg/L	5	02/06/2024 4:24	218159
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/06/2024 22:00	218159
<i>Sample result(s) exceed 10 times the CCB. Data is reportable per the TNI Standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00009	0.00020		< 0.00020	mg/L	1	02/02/2024 11:59	218176



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-040
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: XSG01
Collection Date: 01/29/2024 14:51

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		See Comment	ft	1	01/29/2024 14:51	R342623
Water below bottom of measurement staff.									



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-041
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: YSG03
Collection Date: 01/29/2024 11:52

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		40.53	ft	1	01/29/2024 11:52	R342623



Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

Lab ID: 24010966-042

Client Sample ID: Field Blank

Matrix: AQUEOUS

Collection Date: 02/01/2024 11:42

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/02/2024 13:19	R342573
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/02/2024 13:19	R342573
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		< 20	mg/L	1	02/02/2024 12:22	R342621
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		< 10	mg/L	1	02/05/2024 13:41	R342640
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		< 0.10	mg/L	1	02/02/2024 12:56	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		< 4	mg/L	1	02/05/2024 13:41	R342647
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		< 0.100	mg/L	1	02/05/2024 9:01	218215
Magnesium	NELAP	0.0055	0.0500		< 0.0500	mg/L	1	02/05/2024 9:01	218215
Potassium	NELAP	0.0400	0.100		< 0.100	mg/L	1	02/05/2024 9:01	218215
Sodium	NELAP	0.018	0.050	J	0.022	mg/L	1	02/05/2024 9:01	218215
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/05/2024 20:33	218215
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/05/2024 20:33	218215
Barium	NELAP	0.0007	0.0010		< 0.0010	mg/L	5	02/05/2024 20:33	218215
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/05/2024 20:33	218215
Boron	NELAP	0.0092	0.025	J	0.014	mg/L	5	02/06/2024 13:36	218215
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/05/2024 20:33	218215
Chromium	NELAP	0.0008	0.0015	J	0.0009	mg/L	5	02/05/2024 20:33	218215
Cobalt	NELAP	0.0001	0.0010		< 0.0010	mg/L	5	02/05/2024 20:33	218215
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/05/2024 20:33	218215
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	02/05/2024 20:33	218215
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	02/05/2024 20:33	218215
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/05/2024 20:33	218215
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/05/2024 20:33	218215
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	02/05/2024 15:49	218217



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-043
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24

Client Sample ID: G052D Duplicate
Collection Date: 01/31/2024 9:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		29.74	ft	1	01/31/2024 9:08	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		2.5	NTU	1	01/31/2024 9:08	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		-56	mV	1	01/31/2024 9:08	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		368	µS/cm	1	01/31/2024 9:08	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		11.8	°C	1	01/31/2024 9:08	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.51	mg/L	1	01/31/2024 9:08	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		6.30		1	01/31/2024 9:08	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		156	mg/L	1	02/01/2024 11:35	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/01/2024 11:35	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		290	mg/L	1	02/02/2024 11:23	R342621
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		45	mg/L	1	02/02/2024 17:36	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.25	mg/L	1	02/02/2024 12:54	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		11	mg/L	1	02/02/2024 17:36	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		45.3	mg/L	1	02/02/2024 12:11	218159
Magnesium	NELAP	0.0055	0.0500		13.7	mg/L	1	02/02/2024 12:11	218159
Potassium	NELAP	0.0400	0.100		0.636	mg/L	1	02/02/2024 12:11	218159
Sodium	NELAP	0.0180	0.0500		25.0	mg/L	1	02/02/2024 12:11	218159
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/06/2024 4:29	218159
Arsenic	NELAP	0.0004	0.0010		0.0013	mg/L	5	02/06/2024 22:06	218159
Barium	NELAP	0.0007	0.0010		0.222	mg/L	5	02/06/2024 4:29	218159
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/06/2024 4:29	218159
Boron	NELAP	0.0092	0.0250		0.102	mg/L	5	02/06/2024 4:29	218159
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/06/2024 4:29	218159
Chromium	NELAP	0.0008	0.0015	J	0.0015	mg/L	5	02/06/2024 4:29	218159
Cobalt	NELAP	0.0001	0.0010		0.0043	mg/L	5	02/08/2024 18:22	218159
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/06/2024 4:29	218159
Lithium	*	0.0015	0.0030	J	0.0027	mg/L	5	02/06/2024 4:29	218159
Molybdenum	NELAP	0.0006	0.0015		0.0019	mg/L	5	02/06/2024 22:06	218159
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/06/2024 4:29	218159
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/06/2024 22:06	218159

Sample result(s) exceed 10 times the CCB. Data is reportable per the TNI Standard.



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-043
Matrix: GROUNDWATER

Work Order: 24010966
Report Date: 20-Feb-24
Client Sample ID: G052D Duplicate
Collection Date: 01/31/2024 9:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00009	0.00020		< 0.00020	mg/L	1	02/02/2024 12:02	218176



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010966-045
Matrix: AQUEOUS

Work Order: 24010966
Report Date: 20-Feb-24

Client Sample ID: Equipment Blank 1
Collection Date: 02/01/2024 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		1	mg/L	1	02/02/2024 13:27	R342573
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	02/02/2024 13:27	R342573
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		< 20	mg/L	1	02/02/2024 12:21	R342621
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		< 10	mg/L	1	02/05/2024 13:52	R342640
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		< 0.10	mg/L	1	02/02/2024 13:12	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4	J	1	mg/L	1	02/05/2024 13:52	R342647
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.035	0.10	J	0.057	mg/L	1	02/05/2024 9:03	218215
Magnesium	NELAP	0.0055	0.050	J	0.015	mg/L	1	02/05/2024 9:03	218215
Potassium	NELAP	0.0400	0.100		< 0.100	mg/L	1	02/05/2024 9:03	218215
Sodium	NELAP	0.018	0.050	J	0.034	mg/L	1	02/05/2024 9:03	218215
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/06/2024 15:07	218215
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	02/06/2024 15:07	218215
Barium	NELAP	0.0007	0.0010		< 0.0010	mg/L	5	02/06/2024 15:07	218215
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/06/2024 15:07	218215
Boron	NELAP	0.0092	0.025	J	0.013	mg/L	5	02/06/2024 15:07	218215
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	02/06/2024 15:07	218215
Chromium	NELAP	0.0007	0.0015	J	0.0013	mg/L	5	02/09/2024 15:22	218215
Cobalt	NELAP	0.0001	0.0010		< 0.0010	mg/L	5	02/09/2024 15:22	218215
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/06/2024 15:07	218215
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	02/06/2024 15:07	218215
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	02/09/2024 15:22	218215
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	02/06/2024 15:07	218215
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	02/06/2024 15:07	218215
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	02/05/2024 15:53	218217

Sample Summary

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
24010966-001	G001D	Groundwater	2	01/29/2024 13:12
24010966-002	G002D	Groundwater	2	01/29/2024 13:59
24010966-003	G003	Groundwater	2	01/30/2024 10:05
24010966-004	G005	Groundwater	2	01/31/2024 12:12
24010966-005	G006	Groundwater	2	01/30/2024 12:28
24010966-006	G007	Groundwater	2	01/30/2024 11:17
24010966-007	G008	Groundwater	2	01/30/2024 14:06
24010966-008	G009	Groundwater	2	02/01/2024 10:35
24010966-009	G010	Groundwater	2	01/30/2024 15:07
24010966-010	G011	Groundwater	2	01/30/2024 14:08
24010966-027	G051D	Groundwater	2	01/30/2024 11:12
24010966-028	G052D	Groundwater	2	01/31/2024 9:08
24010966-029	G053D	Groundwater	2	01/30/2024 12:52
24010966-030	G054D	Groundwater	2	01/31/2024 11:11
24010966-037	XPW01_pore	Groundwater	2	01/30/2024 12:14
24010966-038	XPW02_pore	Groundwater	2	01/29/2024 14:51
24010966-039	XPW03_pore	Groundwater	2	01/30/2024 13:02
24010966-040	XSG01	Groundwater	1	01/29/2024 14:51
24010966-041	YSG03	Groundwater	1	01/29/2024 11:52
24010966-042	Field Blank	Aqueous	2	02/01/2024 11:42
24010966-043	G052D Duplicate	Groundwater	2	01/31/2024 9:08
24010966-045	Equipment Blank 1	Aqueous	2	02/01/2024 12:00



Quality Control Results

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Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

STANDARD METHODS 2510 B FIELD

Batch R342623 SampType: LCS Units $\mu\text{S/cm}$

SampleID: LCS-R342623-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		1420	1412	0	100.4	90	110	01/30/2024

Batch R342623 SampType: LCS Units $\mu\text{S/cm}$

SampleID: LCS-R342623-2

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		1420	1412	0	100.7	90	110	01/31/2024

Batch R342623 SampType: LCS Units $\mu\text{S/cm}$

SampleID: LCS-R342623-3

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		1420	1412	0	100.6	90	110	02/01/2024

Batch R342623 SampType: LCS Units $\mu\text{S/cm}$

SampleID: LCS-R342623-4

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		1410	1412	0	100.1	90	110	01/29/2024

Batch R342623 SampType: LCS Units $\mu\text{S/cm}$

SampleID: LCS-R342623-5

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		1410	1412	0	99.9	90	110	01/30/2024

Batch R342623 SampType: LCS Units $\mu\text{S/cm}$

SampleID: LCS-R342623-6

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		1410	1412	0	100.0	90	110	01/31/2024

SW-846 9040B FIELD

Batch R342623 SampType: LCS Units

SampleID: LCS-R342623-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		7.02	7.000	0	100.3	98.57	101.4	01/30/2024



Quality Control Results

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Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 9040B FIELD

Batch R342623		SampType: LCS		Units						
SampID: LCS-R342623-2										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		7.01	7.000	0	100.1	98.57	101.4	01/31/2024

Batch R342623		SampType: LCS		Units						
SampID: LCS-R342623-3										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		7.02	7.000	0	100.3	98.57	101.4	02/01/2024

Batch R342623		SampType: LCS		Units						
SampID: LCS-R342623-4										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		7.08	7.000	0	101.1	98.57	101.4	01/29/2024

Batch R342623		SampType: LCS		Units						
SampID: LCS-R342623-5										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		7.10	7.000	0	101.4	98.57	101.4	01/30/2024

Batch R342623		SampType: LCS		Units						
SampID: LCS-R342623-6										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		7.09	7.000	0	101.3	98.57	101.4	01/31/2024

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R342567		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100		
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100		

Batch R342567		SampType: LCS		Units mg/L						
SampID: LCS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		946	1000	0	94.6	90	110	02/01/2024
Total Dissolved Solids		20		958	1000	0	95.8	90	110	02/01/2024



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Client Project: JOP-24Q1

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STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R342567		SampType: DUP		Units mg/L				RPD Limit 10			Date Analyzed
SampID: 24010966-039ADUP											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	
Total Dissolved Solids			20		396				394.0	0.51	02/01/2024

Batch R342567		SampType: DUP		Units mg/L				RPD Limit 10			
SampID: 24012064-004BDUP											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids			20		864				874.0	1.15	02/01/2024

Batch R342621		SampType: MBLK		Units mg/L							
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	02/02/2024	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	02/02/2024	

Batch R342621		SampType: LCS		Units mg/L							
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Dissolved Solids		20		940	1000	0	94.0	90	110	02/02/2024	
Total Dissolved Solids		20		948	1000	0	94.8	90	110	02/02/2024	

Batch R342621		SampType: DUP		Units mg/L				RPD Limit 10			
SampID: 24010966-015ADUP											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids			20		674				684.0	1.47	02/02/2024

Batch R342621		SampType: DUP		Units mg/L				RPD Limit 10			Date Analyzed
SampID: 24010966-024ADUP											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	
Total Dissolved Solids			20		210				216.0	2.82	02/02/2024

Batch R342937		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Total Dissolved Solids		20	J	16	16.00	0	100.0	-100	100	02/09/2024	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	02/09/2024	
Total Dissolved Solids		20	J	16	16.00	0	100.0	-100	100	02/09/2024	



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STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R342937		SampType: LCS		Units mg/L						
SampID: LCS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		952	1000	0	95.2	90	110	02/09/2024
Total Dissolved Solids		20		956	1000	0	95.6	90	110	02/09/2024
Total Dissolved Solids		20		918	1000	0	91.8	90	110	02/09/2024

Batch R342937		SampType: DUP		Units mg/L				RPD Limit 10				Date Analyzed
SampID: 24011852-012ADUP												
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Total Dissolved Solids			20		404				410.0	1.47		
02/09/2024												

Batch R342937		SampType: DUP		Units mg/L					RPD Limit 10		
SampID: 24011852-035ADUP											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids			20		502				492.0	2.01	02/09/2024

Batch R342937		SampType: DUP		Units mg/L					RPD Limit 10			Date Analyzed
SampID: 24020602-010ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Total Dissolved Solids		50		325				330.0	1.53			

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Batch R342591		SampType: MBLK		Units mg/L							
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		< 10	6.140	0	0	-100	100	02/02/2024	

Batch R342591		SampType: LCS		Units mg/L							
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		19	20.00	0	96.3	90	110	02/02/2024	

Batch R342591		SampType: MS		Units mg/L							
SampID: 24010966-033AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		30	20.00	13.20	86.2	85	115	02/02/2024	



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Client Project: JOP-24Q1

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Batch R342591		SampType: MSD		Units mg/L				RPD Limit 10			Date Analyzed	
SampID: 24010966-033AMSD												
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Sulfate			10		33	20.00	13.20	100.0	30.44	8.70	02/02/2024	

Batch R342591		SampType: MS		Units mg/L							
SampID: 24012064-001BMS											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		10	S	22	20.00	7.570	74.7	85	115	02/02/2024	

Batch R342591		SampType: MSD		Units mg/L				RPD Limit 10			Date Analyzed
SampID: 24012064-001BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	
Sulfate			10	S	21	20.00	7.570	69.5	22.50	4.69	02/02/2024

Batch R342591		SampType: MS		Units mg/L							
SampID: 24012064-005BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		50		230	100.0	132.4	97.4	85	115	02/02/2024	

Batch R342591		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 24012064-005BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate			50		234	100.0	132.4	101.7	229.8	1.85	02/02/2024

Batch R342591		SampType: MS		Units mg/L							
SampID: 24020010-001BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		50	E	268	100.0	160.7	107.4	85	115	02/02/2024	

Batch R342591		SampType: MSD		Units mg/L		RPD Limit 10					Date Analyzed	
SampID: 24020010-001BMSD												
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Sulfate			50	E	252	100.0	160.7	90.8	268.1	6.38	02/02/2024	

Batch R342640		SampType: MBLK		Units mg/L							
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		< 10	6.140	0	0	-100	100	02/05/2024	



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Batch R342640		SampType: LCS		Units mg/L							
SampID: ICV/LCS											Date
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
Sulfate		10		19	20.00	0	95.4	90	110	02/05/2024	

Batch R342640		SampType: MS		Units mg/L						
SampID: 24010966-038AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		1000		4710	2000	2765	97.2	85	115	02/05/2024

Batch R342640		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 24010966-038AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate			1000		4540	2000	2765	88.8	4709	3.62	02/05/2024

Batch R342640		SampType: MS		Units mg/L							
SampID: 24020055-002BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		20	E	107	40.00	70.83	91.4	90	110	02/05/2024	

Batch R342640		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 24020055-002BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate			20	E	109	40.00	70.83	96.2	107.4	1.77	02/05/2024

Batch R342640		SampType: MS		Units mg/L							
SampID: 24020079-003BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		20		75	40.00	35.36	98.8	90	110	02/05/2024	

Batch R342640		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 24020079-003BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate			20		74	40.00	35.36	97.6	74.86	0.59	02/05/2024

Batch R342640		SampType: MS		Units mg/L						
SampID: 24020136-001AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		100		361	200.0	181.0	89.8	85	115	02/05/2024



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Client Project: JOP-24Q1

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Batch R342640		SampType: MSD		Units mg/L				RPD Limit 10			Date Analyzed	
SampID: 24020136-001AMSD												
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Sulfate			100		365	200.0	181.0	91.8	360.6	1.10	02/05/2024	

Batch R342640		SampType: MS		Units mg/L							
SampID: 24020177-001BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		20		98	40.00	61.83	90.0	85	115	02/05/2024	

Batch R342640		SampType: MSD		Units mg/L				RPD Limit 10			Date Analyzed	
SampID: 24020177-001BMSD												
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Sulfate			20		97	40.00	61.83	89.0	97.82	0.39	02/05/2024	

Batch R342640		SampType: MS		Units mg/L							
SampID: 24020177-007BMS											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		20	E	102	40.00	66.18	88.8	85	115	02/05/2024	

Batch R342640		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 24020177-007BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate			20	E	103	40.00	66.18	91.2	101.7	0.92	02/05/2024

Batch R342640		SampType: MS		Units mg/L							
SampID: 24020179-003BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		20	E	101	40.00	64.19	92.9	85	115	02/05/2024	

Batch R342640		SampType: MSD		Units mg/L		RPD Limit 10					Date Analyzed	
SampID: 24020179-003BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Sulfate		20	E	102	40.00	64.19	94.8	101.3	0.76	02/05/2024		



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Client Project: JOP-24Q1

Work Order: 24010966
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Batch R342565		SampType: MBLK		Units mg/L							
SampID: MBLK											Date
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
Fluoride		0.10		< 0.10	0.0500	0	0	-100	100	02/01/2024	

Batch R342565		SampType: LCS		Units mg/L							
SampID: LCS											Date
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
Fluoride		0.10		0.95	1.000	0	95.4	90	110	02/01/2024	

Batch R342565		SampType: MS		Units mg/L						
SampID: 24010118-009AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		1.96	2.000	0.07300	94.5	75	125	02/02/2024

Batch R342565		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24010118-009AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride			0.10		2.05	2.000	0.07300	98.8	1.963	4.24	02/02/2024

Batch R342565		SampType: MS		Units mg/L						
SampID: 24010247-065AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		1.00		19.0	20.00	1.280	88.8	75	125	02/02/2024

Batch R342565		SampType: MSD		Units mg/L					RPD Limit 15		
SampID: 24010247-065AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride			1.00		18.3	20.00	1.280	85.2	19.05	3.96	02/02/2024

Batch R342565		SampType: MS		Units mg/L							
SampID: 24010966-006AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.37	2.000	0.3750	99.6	75	125	02/01/2024	

Batch R342565		SampType: MSD		Units mg/L					RPD Limit 15		
SampID: 24010966-006AMSD											Date Analyzed
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	
Fluoride			0.10		2.45	2.000	0.3750	103.7	2.366	3.45	02/01/2024



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Client: Ramboll
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Work Order: 24010966
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Batch R342565		SampType: MS		Units mg/L							Date
SampID: 24010966-016AMS											Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Fluoride		0.10		2.44	2.000	0.2960	107.2	75	125	02/02/2024	

Batch R342565		SampType: MSD		Units mg/L							RPD Limit 15	Date
SampID: 24010966-016AMSD												Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Fluoride		0.10		2.40	2.000	0.2960	105.2	2.441	1.69	02/02/2024		

Batch R342565		SampType: MS		Units mg/L							Date
SampID: 24010966-020AMS											Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Fluoride		0.10		2.31	2.000	0.3760	96.5	75	125	02/01/2024	

Batch R342565		SampType: MSD		Units mg/L							RPD Limit 15	Date
SampID: 24010966-020AMSD												Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Fluoride		0.10		2.30	2.000	0.3760	96.4	2.306	0.13	02/01/2024		

Batch R342565		SampType: MS		Units mg/L							Date
SampID: 24010966-021AMS											Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Fluoride		0.10		2.28	2.000	0.2790	100.3	75	125	02/02/2024	

Batch R342565		SampType: MSD		Units mg/L							RPD Limit 15	Date
SampID: 24010966-021AMSD												Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Fluoride		0.10		2.34	2.000	0.2790	103.2	2.285	2.46	02/02/2024		

Batch R342565		SampType: MS		Units mg/L							Date
SampID: 24010966-030AMS											Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Fluoride		0.10		2.36	2.000	0.2690	104.6	75	125	02/02/2024	

Batch R342565		SampType: MSD		Units mg/L							RPD Limit 15	Date
SampID: 24010966-030AMSD												Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Fluoride		0.10		2.19	2.000	0.2690	96.2	2.361	7.38	02/02/2024		



Quality Control Results

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Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 9214 (TOTAL)

Batch R342565		SampType: MS		Units mg/L						
SampID: 24010966-044AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		2.29	2.000	0.2200	103.4	75	125	02/02/2024

Batch R342565		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24010966-044AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride			0.10		2.22	2.000	0.2200	99.8	2.289	3.24	02/02/2024

Batch R342565		SampType: MS		Units mg/L							
SampID: 24020010-008BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.35	2.000	0.2920	102.9	75	125	02/02/2024	

Batch R342565		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed
SampID: 24020010-008BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Fluoride		0.10		2.29	2.000	0.2920	100.0	2.350	2.46	02/02/2024	

SW-846 9251 (TOTAL)

Batch R342603		SampType: MBLK		Units mg/L							
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		< 4	0.5000	0	0	-100	100	02/02/2024	

Batch R342603		SampType: LCS		Units mg/L							
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		20	20.00	0	99.6	90	110	02/02/2024	

Batch R342603		SampType: MS		Units mg/L							Date Analyzed
SampID: 24010966-033AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Chloride		4	E	56	20.00	38.26	89.7	85	115	02/02/2024	



Quality Control Results

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Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 9251 (TOTAL)

Batch R342603		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24010966-033AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride			4	E	56	20.00	38.26	90.5	56.20	0.28	02/02/2024

Batch R342603		SampType: MS		Units mg/L							
SampID: 24010966-038AMS											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Chloride		40		306	200.0	104.4	100.8	85	115	02/02/2024	

Batch R342603		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24010966-038AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride			40		304	200.0	104.4	100.0	306.0	0.54	02/02/2024

Batch R342603		SampType: MS		Units mg/L							
SampID: 24012064-001BMS											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Chloride		4		33	20.00	13.95	96.4	85	115	02/02/2024	

Batch R342603		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24012064-001BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride			4		32	20.00	13.95	91.5	33.22	2.96	02/02/2024

Batch R342603		SampType: MS		Units mg/L							
SampID: 24012064-005BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		20		138	100.0	46.41	92.0	85	115	02/02/2024	

Batch R342603		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24012064-005BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride			20		140	100.0	46.41	93.5	138.5	1.06	02/02/2024

Batch R342603		SampType: MS		Units mg/L							
SampID: 24020010-001BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		35	20.00	17.48	88.0	85	115	02/02/2024	



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Client: Ramboll
Client Project: JOP-24Q1

Work Order: 24010966
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SW-846 9251 (TOTAL)

Batch R342603		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed	
SampID: 24020010-001BMSD												
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Chloride			4		35	20.00	17.48	87.4	35.07	0.34	02/02/2024	

Batch R342603		SampType: MS		Units mg/L							
SampID: 24020055-002BMS											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Chloride		4		23	20.00	3.370	98.4	85	115	02/02/2024	

Batch R342603		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24020055-002BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		23	20.00	3.370	98.4	23.05	0.00	02/02/2024	

Batch R342603		SampType: MS		Units mg/L							
SampID: 24020079-003BMS											Date
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
Chloride		4		35	20.00	16.07	92.6	85	115	02/02/2024	

Batch R342603		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed
SampID: 24020079-003BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	
Chloride			4		35	20.00	16.07	95.4	34.60	1.55	02/02/2024

Batch R342647		SampType: MBLK		Units mg/L							
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		< 4	0.5000	0	0	-100	100	02/05/2024	

Batch R342647		SampType: LCS		Units mg/L							
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		20	20.00	0	100.0	90	110	02/05/2024	

Batch R342647		SampType: MS		Units mg/L							
SampID: 24020136-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		29	20.00	10.07	93.0	85	115	02/05/2024	



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Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 9251 (TOTAL)

Batch R342647		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24020136-001AMSD											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Chloride		4		29	20.00	10.07	92.6	28.67	0.24	02/05/2024	

Batch R342647		SampType: MS		Units mg/L							
SampID: 24020177-001BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		43	20.00	25.62	88.6	85	115	02/05/2024	

Batch R342647		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed
SampID: 24020177-001BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	
Chloride			4		44	20.00	25.62	89.5	43.33	0.41	02/05/2024

Batch R342647		SampType: MS		Units mg/L							
SampID: 24020177-007BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		27	20.00	8.110	93.2	85	115	02/05/2024	

Batch R342647		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24020177-007BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride			4		27	20.00	8.110	94.3	26.74	0.86	02/05/2024

Batch R342647		SampType: MS		Units mg/L							
SampID: 24020179-003BMS											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Chloride		4		24	20.00	4.930	94.5	85	115	02/05/2024	

Batch R342647		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed
SampID: 24020179-003BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	
Chloride			4		24	20.00	4.930	94.6	23.83	0.13	02/05/2024



Quality Control Results

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Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 218158 SampType: MBLK Units mg/L

SampleID: MBLK-218158

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	02/05/2024
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	02/05/2024
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	02/05/2024
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	02/05/2024

Batch 218158 SampType: LCS Units mg/L

SampleID: LCS-218158

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		2.68	2.500	0	107.2	85	115	02/05/2024
Magnesium		0.0500		2.43	2.500	0	97.3	85	115	02/05/2024
Potassium		0.100		2.60	2.500	0	103.8	85	115	02/05/2024
Sodium		0.0500		2.59	2.500	0	103.4	85	115	02/05/2024

Batch 218158 SampType: MS Units mg/L

SampleID: 24010966-003BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	48.4	2.500	44.58	152.0	75	125	02/05/2024
Magnesium		0.0500		17.4	2.500	14.41	120.3	75	125	02/05/2024
Potassium		0.100		3.90	2.500	1.344	102.3	75	125	02/05/2024
Sodium		0.0500		36.6	2.500	33.63	118.8	75	125	02/05/2024

Batch 218158 SampType: MSD Units mg/L

RPD Limit 20

SampleID: 24010966-003BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100		47.6	2.500	44.58	121.6	48.38	1.58	02/05/2024
Magnesium		0.0500		17.1	2.500	14.41	108.6	17.41	1.70	02/05/2024
Potassium		0.100		3.86	2.500	1.344	100.8	3.901	0.96	02/05/2024
Sodium		0.0500		36.1	2.500	33.63	98.4	36.60	1.40	02/05/2024

Batch 218158 SampType: MS Units mg/L

SampleID: 24010966-018BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	59.4	2.500	53.34	242.8	75	125	02/05/2024
Magnesium		0.0500	S	18.5	2.500	15.33	127.6	75	125	02/05/2024
Potassium		0.100		3.94	2.500	1.278	106.6	75	125	02/05/2024
Sodium		0.0500	S	32.6	2.500	28.59	160.8	75	125	02/05/2024



Quality Control Results

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Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 218158		SampType: MSD		Units mg/L				RPD Limit 20		
SampleID: 24010966-018BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100	S	59.8	2.500	53.34	258.0	59.41	0.64	02/05/2024
Magnesium		0.0500	S	18.7	2.500	15.33	133.8	18.52	0.82	02/05/2024
Potassium		0.100		3.96	2.500	1.278	107.3	3.942	0.48	02/05/2024
Sodium		0.0500	S	32.6	2.500	28.59	162.4	32.61	0.12	02/05/2024

Batch 218159		SampType: MBLK		Units mg/L						
SampleID: MBLK-218159										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	02/02/2024
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	02/02/2024
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	02/02/2024
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	02/02/2024

Batch 218159		SampType: LCS		Units mg/L						
SampleID: LCS-218159										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		2.49	2.500	0	99.7	85	115	02/02/2024
Magnesium		0.0500		2.38	2.500	0	95.2	85	115	02/02/2024
Potassium		0.100		2.54	2.500	0	101.8	85	115	02/02/2024
Sodium		0.0500		2.50	2.500	0	99.9	85	115	02/02/2024

Batch 218159		SampType: MS		Units mg/L						
SampleID: 24010966-027BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		30.5	2.500	28.31	87.6	75	125	02/02/2024
Magnesium		0.0500		14.4	2.500	12.12	90.5	75	125	02/02/2024
Potassium		0.100		2.93	2.500	0.4145	100.4	75	125	02/02/2024
Sodium		0.0500	S	34.8	2.500	33.03	70.8	75	125	02/02/2024

Batch 218159		SampType: MSD		Units mg/L				RPD Limit 20		
SampleID: 24010966-027BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100		30.8	2.500	28.31	100.4	30.50	1.04	02/02/2024
Magnesium		0.0500		14.5	2.500	12.12	96.4	14.39	1.02	02/02/2024
Potassium		0.100		2.94	2.500	0.4145	101.1	2.926	0.57	02/02/2024
Sodium		0.0500		35.1	2.500	33.03	82.0	34.80	0.80	02/02/2024



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Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 218215 SampType: MBLK Units mg/L

SampID: MBLK-218215

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	02/05/2024
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	02/05/2024
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	02/05/2024
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	02/05/2024

Batch 218215 SampType: LCS Units mg/L

SampID: LCS-218215

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		2.37	2.500	0	94.8	85	115	02/05/2024
Magnesium		0.0500		2.28	2.500	0	91.1	85	115	02/05/2024
Potassium		0.100		2.63	2.500	0	105.4	85	115	02/05/2024
Sodium		0.0500		2.42	2.500	0	96.6	85	115	02/05/2024

Batch 218215 SampType: MS Units mg/L

SampID: 24010966-011BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	75.4	2.500	74.42	37.6	75	125	02/05/2024
Magnesium		0.0500		25.5	2.500	23.58	75.0	75	125	02/05/2024
Potassium		0.100		4.52	2.500	1.893	105.2	75	125	02/05/2024
Sodium		0.0500		32.0	2.500	29.65	94.0	75	125	02/05/2024

Batch 218215 SampType: MSD Units mg/L

RPD Limit 20

SampID: 24010966-011BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100	S	75.6	2.500	74.42	49.2	75.36	0.38	02/05/2024
Magnesium		0.0500		25.5	2.500	23.58	78.4	25.46	0.34	02/05/2024
Potassium		0.100		4.47	2.500	1.893	102.9	4.522	1.24	02/05/2024
Sodium		0.0500		31.6	2.500	29.65	77.6	32.00	1.29	02/05/2024

Batch 218215 SampType: MS Units mg/L

SampID: 24010966-045BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		2.42	2.500	0.05690	94.6	75	125	02/05/2024
Magnesium		0.0500		2.31	2.500	0.01530	91.6	75	125	02/05/2024
Potassium		0.100		2.68	2.500	0	107.3	75	125	02/05/2024
Sodium		0.0500		2.47	2.500	0.03430	97.3	75	125	02/05/2024



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Client: Ramboll

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Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch	218215	SampType:	MSD	Units	mg/L	RPD Limit 20				
SampID: 24010966-045BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100		2.44	2.500	0.05690	95.1	2.422	0.54	02/05/2024
Magnesium		0.0500		2.30	2.500	0.01530	91.2	2.306	0.45	02/05/2024
Potassium		0.100		2.69	2.500	0	107.7	2.683	0.36	02/05/2024
Sodium		0.0500		2.48	2.500	0.03430	97.8	2.467	0.54	02/05/2024

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch	218158	SampType:	MBLK	Units mg/L							
SampID:	MBLK-218158										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	02/05/2024	
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	02/05/2024	
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	02/05/2024	
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	02/05/2024	
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	02/06/2024	
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	02/05/2024	
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	02/05/2024	
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	02/05/2024	
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	02/05/2024	
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	02/05/2024	
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	02/05/2024	
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	02/05/2024	
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	02/05/2024	



Quality Control Results

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Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 218158 SampType: LCS Units mg/L

SampID: LCS-218158

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.519	0.5000	0	103.9	80	120	02/05/2024
Arsenic		0.0010		0.539	0.5000	0	107.9	80	120	02/05/2024
Barium		0.0010		2.00	2.000	0	99.9	80	120	02/05/2024
Beryllium		0.0010		0.0536	0.0500	0	107.1	80	120	02/05/2024
Boron		0.0250		0.431	0.5000	0	86.1	80	120	02/06/2024
Cadmium		0.0010		0.0513	0.0500	0	102.7	80	120	02/05/2024
Chromium		0.0015		0.197	0.2000	0	98.7	80	120	02/05/2024
Cobalt		0.0010		0.500	0.5000	0	100.1	80	120	02/05/2024
Lead		0.0010		0.501	0.5000	0	100.3	80	120	02/05/2024
Lithium	*	0.0030		0.509	0.5000	0	101.7	80	120	02/05/2024
Molybdenum		0.0015		0.473	0.5000	0	94.6	80	120	02/05/2024
Selenium		0.0010		0.510	0.5000	0	102.1	80	120	02/05/2024
Thallium		0.0020		0.214	0.2500	0	85.6	80	120	02/05/2024

Batch 218158 SampType: MS Units mg/L

SampID: 24010966-003BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.525	0.5000	0	105.1	75	125	02/05/2024
Arsenic		0.0010		0.573	0.5000	0.003423	113.9	75	125	02/05/2024
Barium		0.0010		2.35	2.000	0.07332	113.9	75	125	02/05/2024
Beryllium		0.0010		0.0631	0.0500	0.0006634	124.9	75	125	02/05/2024
Boron		0.0250		0.637	0.5000	0.2273	81.9	75	125	02/06/2024
Cadmium		0.0010		0.0586	0.0500	0	117.2	75	125	02/05/2024
Chromium		0.0015		0.236	0.2000	0.01323	111.5	75	125	02/05/2024
Cobalt		0.0010		0.542	0.5000	0.006485	107.2	75	125	02/05/2024
Lead		0.0010		0.587	0.5000	0.003326	116.8	75	125	02/05/2024
Lithium	*	0.0030		0.594	0.5000	0.002721	118.3	75	125	02/05/2024
Molybdenum		0.0015		0.557	0.5000	0.001199	111.2	75	125	02/05/2024
Selenium		0.0010		0.534	0.5000	0	106.9	75	125	02/05/2024
Thallium		0.0020		0.256	0.2500	0	102.3	75	125	02/05/2024



Quality Control Results

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Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 218158		SampType: MSD		Units mg/L				RPD Limit 20		
SampID: 24010966-003BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		0.529	0.5000	0	105.8	0.5253	0.72	02/05/2024
Arsenic		0.0010		0.586	0.5000	0.003423	116.6	0.5728	2.32	02/05/2024
Barium		0.0010		2.37	2.000	0.07332	114.7	2.351	0.67	02/05/2024
Beryllium		0.0010		0.0614	0.0500	0.0006634	121.4	0.06313	2.84	02/05/2024
Boron		0.0250		0.620	0.5000	0.2273	78.6	0.6367	2.60	02/06/2024
Cadmium		0.0010		0.0610	0.0500	0	121.9	0.05862	3.91	02/05/2024
Chromium		0.0015		0.247	0.2000	0.01323	116.8	0.2363	4.38	02/05/2024
Cobalt		0.0010		0.540	0.5000	0.006485	106.8	0.5425	0.39	02/05/2024
Lead		0.0010		0.592	0.5000	0.003326	117.7	0.5873	0.76	02/05/2024
Lithium	*	0.0030		0.578	0.5000	0.002721	115.0	0.5943	2.85	02/05/2024
Molybdenum		0.0015		0.581	0.5000	0.001199	115.9	0.5572	4.11	02/05/2024
Selenium		0.0010		0.545	0.5000	0	108.9	0.5345	1.87	02/05/2024
Thallium		0.0020		0.265	0.2500	0	105.8	0.2558	3.40	02/05/2024

Batch 218158		SampType: MS		Units mg/L						
SampID: 24010966-018BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.430	0.5000	0	86.0	75	125	02/06/2024
Arsenic		0.0010		0.448	0.5000	0	89.6	75	125	02/06/2024
Barium		0.0010		1.75	2.000	0.08356	83.5	75	125	02/06/2024
Beryllium		0.0010		0.0449	0.0500	0	89.9	75	125	02/06/2024
Boron		0.0250		1.02	0.5000	0.6124	81.3	75	125	02/06/2024
Cadmium		0.0010		0.0419	0.0500	0	83.8	75	125	02/06/2024
Chromium		0.0015		0.198	0.2000	0.001115	98.4	75	125	02/07/2024
Cobalt		0.0010		0.502	0.5000	0	100.3	75	125	02/07/2024
Lead		0.0010		0.411	0.5000	0	82.3	75	125	02/06/2024
Lithium	*	0.0030		0.436	0.5000	0	87.2	75	125	02/06/2024
Molybdenum		0.0015		0.455	0.5000	0.0006441	90.8	75	125	02/09/2024
Selenium		0.0010		0.427	0.5000	0.0009151	85.2	75	125	02/06/2024
Thallium		0.0020		0.299	0.2500	0	119.5	75	125	02/06/2024



Quality Control Results

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Client: Ramboll
Client Project: JOP-24Q1

Work Order: 24010966
Report Date: 20-Feb-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 218158		SampType: MSD		Units mg/L				RPD Limit 20		
SampID: 24010966-018BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		0.437	0.5000	0	87.3	0.4299	1.59	02/06/2024
Arsenic		0.0010		0.451	0.5000	0	90.3	0.4481	0.70	02/06/2024
Barium		0.0010		1.77	2.000	0.08356	84.4	1.753	1.11	02/06/2024
Beryllium		0.0010		0.0461	0.0500	0	92.2	0.04493	2.54	02/06/2024
Boron		0.0250		1.03	0.5000	0.6124	83.0	1.019	0.80	02/06/2024
Cadmium		0.0010		0.0423	0.0500	0	84.7	0.04189	1.05	02/06/2024
Chromium		0.0015		0.197	0.2000	0.001115	97.8	0.1979	0.54	02/07/2024
Cobalt		0.0010		0.491	0.5000	0	98.3	0.5016	2.03	02/07/2024
Lead		0.0010		0.430	0.5000	0	85.9	0.4113	4.34	02/06/2024
Lithium	*	0.0030		0.437	0.5000	0	87.4	0.4361	0.25	02/06/2024
Molybdenum		0.0015		0.451	0.5000	0.0006441	90.1	0.4547	0.82	02/09/2024
Selenium		0.0010		0.426	0.5000	0.0009151	85.0	0.4267	0.18	02/06/2024
Thallium		0.0020		0.291	0.2500	0	116.3	0.2988	2.76	02/06/2024

Batch 218159		SampType: MBLK		Units mg/L						
SampID: MBLK-218159										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	02/06/2024
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	02/06/2024
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	02/06/2024
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	02/06/2024
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	02/06/2024
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	02/06/2024
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	02/06/2024
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	02/06/2024
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	02/06/2024
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	02/06/2024
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	02/06/2024
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	02/06/2024
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	02/06/2024



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Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 218159 SampType: LCS Units mg/L

SampID: LCS-218159

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.460	0.5000	0	91.9	80	120	02/06/2024
Arsenic		0.0010		0.477	0.5000	0	95.4	80	120	02/06/2024
Barium		0.0010		1.80	2.000	0	90.0	80	120	02/06/2024
Beryllium		0.0010		0.0472	0.0500	0	94.5	80	120	02/06/2024
Boron		0.0250		0.425	0.5000	0	85.0	80	120	02/06/2024
Cadmium		0.0010		0.0460	0.0500	0	92.0	80	120	02/06/2024
Chromium		0.0015		0.177	0.2000	0	88.3	80	120	02/06/2024
Cobalt		0.0010		0.438	0.5000	0	87.6	80	120	02/06/2024
Lead		0.0010		0.457	0.5000	0	91.3	80	120	02/06/2024
Lithium	*	0.0030		0.453	0.5000	0	90.6	80	120	02/06/2024
Molybdenum		0.0015		0.450	0.5000	0	90.0	80	120	02/06/2024
Selenium		0.0010		0.448	0.5000	0	89.6	80	120	02/06/2024
Thallium		0.0020		0.206	0.2500	0	82.2	80	120	02/06/2024

Batch 218159 SampType: MS Units mg/L

SampID: 24010966-027BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.446	0.5000	0	89.2	75	125	02/06/2024
Arsenic		0.0010		0.468	0.5000	0	93.6	75	125	02/06/2024
Barium		0.0010		1.82	2.000	0.03457	89.1	75	125	02/06/2024
Beryllium		0.0010		0.0463	0.0500	0	92.7	75	125	02/06/2024
Boron		0.0250		1.13	0.5000	0.7039	86.2	75	125	02/06/2024
Cadmium		0.0010		0.0450	0.0500	0	90.0	75	125	02/06/2024
Chromium		0.0015		0.205	0.2000	0.002096	101.7	75	125	02/07/2024
Cobalt		0.0010		0.530	0.5000	0.001211	105.7	75	125	02/08/2024
Lead		0.0010		0.453	0.5000	0	90.5	75	125	02/06/2024
Lithium	*	0.0030		0.463	0.5000	0.005380	91.4	75	125	02/06/2024
Molybdenum		0.0015		0.472	0.5000	0	94.5	75	125	02/09/2024
Selenium		0.0010		0.452	0.5000	0.004882	89.5	75	125	02/06/2024
Thallium		0.0020		0.194	0.2500	0	77.7	75	125	02/06/2024



Quality Control Results

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Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch	218159	SampType:	MSD	Units mg/L				RPD Limit			20
SampID: 24010966-027BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony			0.0010		0.433	0.5000	0	86.6	0.4461	3.02	02/06/2024
Arsenic			0.0010		0.464	0.5000	0	92.8	0.4678	0.81	02/06/2024
Barium			0.0010		1.73	2.000	0.03457	84.8	1.817	4.88	02/06/2024
Beryllium			0.0010		0.0461	0.0500	0	92.2	0.04634	0.56	02/06/2024
Boron			0.0250		1.17	0.5000	0.7039	92.3	1.135	2.65	02/06/2024
Cadmium			0.0010		0.0434	0.0500	0	86.8	0.04500	3.67	02/06/2024
Chromium			0.0015		0.193	0.2000	0.002096	95.6	0.2055	6.11	02/07/2024
Cobalt			0.0010		0.496	0.5000	0.001211	99.0	0.5295	6.54	02/08/2024
Lead			0.0010		0.419	0.5000	0	83.8	0.4527	7.76	02/06/2024
Lithium		*	0.0030		0.460	0.5000	0.005380	90.9	0.4625	0.61	02/06/2024
Molybdenum			0.0015		0.462	0.5000	0	92.5	0.4724	2.14	02/09/2024
Selenium			0.0010		0.446	0.5000	0.004882	88.2	0.4525	1.51	02/06/2024
Thallium			0.0020		0.192	0.2500	0	76.9	0.1943	1.02	02/06/2024

Batch	218215	SampType:	MBLK	Units mg/L							
SampID: MBLK-218215											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	02/05/2024	
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	02/05/2024	
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	02/05/2024	
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	02/05/2024	
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	02/06/2024	
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	02/05/2024	
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	02/05/2024	
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	02/05/2024	
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	02/05/2024	
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	02/05/2024	
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	02/05/2024	
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	02/05/2024	
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	02/05/2024	



Quality Control Results

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Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 218215 SampType: LCS Units mg/L

SampleID: LCS-218215

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.464	0.5000	0	92.9	80	120	02/05/2024
Arsenic		0.0010		0.505	0.5000	0	100.9	80	120	02/05/2024
Barium		0.0010		1.86	2.000	0	92.8	80	120	02/05/2024
Beryllium		0.0010		0.0456	0.0500	0	91.2	80	120	02/05/2024
Boron		0.0250		0.447	0.5000	0	89.4	80	120	02/06/2024
Cadmium		0.0010		0.0479	0.0500	0	95.9	80	120	02/05/2024
Chromium		0.0015		0.184	0.2000	0	91.9	80	120	02/05/2024
Cobalt		0.0010		0.463	0.5000	0	92.6	80	120	02/05/2024
Lead		0.0010		0.466	0.5000	0	93.3	80	120	02/05/2024
Lithium	*	0.0030		0.444	0.5000	0	88.9	80	120	02/05/2024
Molybdenum		0.0015		0.459	0.5000	0	91.7	80	120	02/05/2024
Selenium		0.0010		0.476	0.5000	0	95.1	80	120	02/05/2024
Thallium		0.0020		0.216	0.2500	0	86.3	80	120	02/05/2024

Batch 218215 SampType: MS Units mg/L

SampleID: 24010966-011BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.432	0.5000	0	86.4	75	125	02/06/2024
Arsenic		0.0010		0.444	0.5000	0.004113	87.9	75	125	02/06/2024
Barium		0.0010		1.72	2.000	0.05559	83.4	75	125	02/06/2024
Beryllium		0.0010		0.0456	0.0500	0.0003410	90.5	75	125	02/06/2024
Boron		0.0250	S	5.96	0.5000	5.905	10.9	75	125	02/06/2024
Cadmium		0.0010		0.0421	0.0500	0	84.1	75	125	02/06/2024
Chromium		0.0015		0.203	0.2000	0.01324	95.1	75	125	02/08/2024
Cobalt		0.0010		0.498	0.5000	0.002980	99.1	75	125	02/08/2024
Lead		0.0010		0.422	0.5000	0.001746	84.0	75	125	02/06/2024
Lithium	*	0.0030		0.436	0.5000	0.002121	86.8	75	125	02/06/2024
Molybdenum		0.0015		0.442	0.5000	0.0009926	88.2	75	125	02/09/2024
Selenium		0.0010		0.419	0.5000	0	83.7	75	125	02/06/2024
Thallium		0.0020		0.291	0.2500	0	116.3	75	125	02/05/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 218215		SampType: MSD		Units mg/L				RPD Limit 20		
SampID: 24010966-011BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		0.432	0.5000	0	86.4	0.4319	0.01	02/06/2024
Arsenic		0.0010		0.457	0.5000	0.004113	90.6	0.4437	3.02	02/06/2024
Barium		0.0010		1.78	2.000	0.05559	86.1	1.725	3.00	02/06/2024
Beryllium		0.0010		0.0461	0.0500	0.0003410	91.5	0.04561	1.06	02/06/2024
Boron		0.0250	S	6.15	0.5000	5.905	49.0	5.960	3.15	02/06/2024
Cadmium		0.0010		0.0430	0.0500	0	86.1	0.04206	2.29	02/06/2024
Chromium		0.0015		0.201	0.2000	0.01324	93.8	0.2034	1.24	02/08/2024
Cobalt		0.0010		0.489	0.5000	0.002980	97.3	0.4983	1.80	02/08/2024
Lead		0.0010		0.427	0.5000	0.001746	85.1	0.4219	1.29	02/06/2024
Lithium	*	0.0030		0.440	0.5000	0.002121	87.6	0.4359	0.97	02/06/2024
Molybdenum		0.0015		0.459	0.5000	0.0009926	91.7	0.4419	3.87	02/09/2024
Selenium		0.0010		0.432	0.5000	0	86.5	0.4186	3.22	02/06/2024
Thallium		0.0020		0.259	0.2500	0	103.6	0.2908	11.54	02/05/2024

Batch 218215		SampType: MS		Units mg/L						
SampID: 24010966-045BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.429	0.5000	0	85.8	75	125	02/06/2024
Arsenic		0.0010		0.443	0.5000	0	88.6	75	125	02/06/2024
Barium		0.0010		1.65	2.000	0	82.6	75	125	02/06/2024
Beryllium		0.0010		0.0452	0.0500	0	90.5	75	125	02/06/2024
Boron		0.0250		0.437	0.5000	0.01319	84.8	75	125	02/06/2024
Cadmium		0.0010		0.0412	0.0500	0	82.4	75	125	02/06/2024
Chromium		0.0015		0.196	0.2000	0.001332	97.2	75	125	02/09/2024
Cobalt		0.0010		0.496	0.5000	0	99.2	75	125	02/09/2024
Lead		0.0010		0.416	0.5000	0	83.2	75	125	02/06/2024
Lithium	*	0.0030		0.441	0.5000	0	88.1	75	125	02/06/2024
Molybdenum		0.0015		0.449	0.5000	0	89.9	75	125	02/09/2024
Selenium		0.0010		0.422	0.5000	0	84.5	75	125	02/06/2024
Thallium		0.0020		0.201	0.2500	0	80.3	75	125	02/06/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 218215		SampType: MSD		Units mg/L				RPD Limit 20		
SampleID: 24010966-045BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		0.445	0.5000	0	89.0	0.4289	3.63	02/06/2024
Arsenic		0.0010		0.454	0.5000	0	90.7	0.4428	2.43	02/06/2024
Barium		0.0010		1.69	2.000	0	84.7	1.653	2.43	02/06/2024
Beryllium		0.0010		0.0452	0.0500	0	90.3	0.04524	0.14	02/06/2024
Boron		0.0250		0.442	0.5000	0.01319	85.8	0.4372	1.12	02/06/2024
Cadmium		0.0010		0.0441	0.0500	0	88.2	0.04120	6.82	02/06/2024
Chromium		0.0015		0.197	0.2000	0.001332	97.8	0.1956	0.65	02/09/2024
Cobalt		0.0010		0.480	0.5000	0	96.1	0.4959	3.19	02/09/2024
Lead		0.0010		0.421	0.5000	0	84.2	0.4161	1.23	02/06/2024
Lithium	*	0.0030		0.440	0.5000	0	88.1	0.4407	0.07	02/06/2024
Molybdenum		0.0015		0.464	0.5000	0	92.8	0.4494	3.23	02/09/2024
Selenium		0.0010		0.434	0.5000	0	86.9	0.4225	2.80	02/06/2024
Thallium		0.0020		0.213	0.2500	0	85.0	0.2007	5.74	02/06/2024

SW-846 7470A (TOTAL)

Batch 218173		SampType: MBLK		Units mg/L						
SampleID: MBLK-218173										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		< 0.00020	0.0001	0	0	-100	100	02/02/2024

Batch 218173		SampType: LCS		Units mg/L						
SampleID: LCS-218173										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00488	0.0050	0	97.7	85	115	02/02/2024

Batch 218173		SampType: MS		Units mg/L						
SampleID: 24012106-003CMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00483	0.0050	0	96.5	75	125	02/02/2024

Batch 218173		SampType: MSD		Units mg/L				RPD Limit 15			
SampleID: 24012106-003CMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury			0.00020		0.00494	0.0050	0	98.7	0.004827	2.24	02/02/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 7470A (TOTAL)

Batch 218175		SampType: MBLK		Units mg/L							
SampID: MBLK-218175											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		< 0.00020	0.0001	0	0	-100	100	02/02/2024	

Batch 218175		SampType: LCS		Units mg/L							
SampID: LCS-218175											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00472	0.0050	0	94.3	85	115	02/02/2024	

Batch 218175		SampType: MS		Units mg/L							
SampID: 24010966-017BMS											Date
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
Mercury		0.00020		0.00504	0.0050	0	100.7	75	125	02/02/2024	

Batch 218175		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24010966-017BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		0.00481	0.0050	0	96.3	0.005037	4.55	02/02/2024	

Batch 218175		SampType: MS		Units mg/L							
SampID: 24010966-027BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00423	0.0050	0	84.5	75	125	02/02/2024	

Batch 218175		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24010966-027BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury			0.00020		0.00484	0.0050	0	96.8	0.004226	13.52	02/02/2024

Batch 218176		SampType: MBLK		Units mg/L							
SampID: MBLK-218176											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		< 0.00020	0.0001	0	0	-100	100	02/02/2024	

Batch 218176		SampType: LCS		Units mg/L							
SampID: LCS-218176											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00477	0.0050	0	95.4	85	115	02/02/2024	



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 7470A (TOTAL)

Batch 218176		SampType: MS		Units mg/L							
SampID: 24012081-001BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00506	0.0050	0	101.2	75	125	02/02/2024	

Batch 218176		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24012081-001BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		0.00493	0.0050	0	98.6	0.005059	2.56	02/02/2024	

Batch 218217		SampType: MBLK		Units mg/L							
SampID: MBLK-218217											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		< 0.00020	0.0001	0	0	-100	100	02/05/2024	

Batch 218217		SampType: LCS		Units mg/L							
SampID: LCS-218217											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00480	0.0050	0	96.0	85	115	02/05/2024	

Batch 218217		SampType: MS		Units mg/L							
SampID: 24010118-002BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00493	0.0050	0	98.6	75	125	02/05/2024	

Batch 218217		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24010118-002BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		0.00495	0.0050	0	99.1	0.004932	0.41	02/05/2024	

Batch 218217		SampType: MS		Units mg/L							
SampID: 24010966-012BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00471	0.0050	0	94.1	75	125	02/05/2024	

Batch 218217		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24010966-012BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		0.00502	0.0050	0	100.3	0.004707	6.34	02/05/2024	



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24010966

Client Project: JOP-24Q1

Report Date: 20-Feb-24

SW-846 7470A (TOTAL)

Batch 218639 SampType: MBLK Units mg/L

SampID: MBLK-218639

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		< 0.00020	0.0001	0	0	-100	100	02/13/2024

Batch 218639 SampType: LCS Units mg/L

SampID: LCS-218639

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00439	0.0050	0	87.8	85	115	02/13/2024



Receiving Check List

<http://www.teklabinc.com/>

Client: Ramboll
Client Project: JOP-24Q1

Work Order: 24010966
Report Date: 20-Feb-24

Carrier: Tracy Carroll

Received By: AMD

Completed by:

On:

01-Feb-24

Amber Dilallo

Amber Dilallo

Reviewed by:

On:

02-Feb-24

Ellie Hopkins

Ellie Hopkins

Pages to follow:

Chain of custody

5

Extra pages included

0

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C 1.7

Type of thermal preservation?

None ☐

Ice ☒

Blue Ice ☐

Dry Ice ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☒

Lab ☐

NA ☐

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water – at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

Any No responses must be detailed below or on the COC.

pH strip #90719. - amberdilallo - 2/1/2024 9:10:22 AM

Sample received 2/1/24 at 1540 (on ice at 9.3C - LTG3). pH strip #90719. AMD 2/2/24

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

24010966
JOP-257-401

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 1 of 3	
Company: Vistra Corp-Joppa		Report To: Brian Voelker		Attention: Brian Voelker		REGULATORY AGENCY NPDES GROUND WATER DRINKING WATER UST RCRA OTHER	
Address: 2100 Portland Road		Copy To: Sam Davies: samantha.davies@vistracorp.com		Company Name: Vistra Corp			
Joppa, IL 62953		Roger Faughn - roger.faughn@vistracorp.com		Address: see Section A			
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:		Site Location	
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:		STATE: IL	
Requested Due Date/TAT: 10 day		Project Number: 2285		Profile #			

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test	Requested Analysis Filtered (Y/N)												Residual Chlorine (Y/N)	Project No./ Lab I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
				DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		JOP-257-401	JOP-257-402	JOP-845-401	JOP-PGMP-401																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										

PH ✓ 90719 Gm 2/1/24

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Tracy Carr					
SIGNATURE of SAMPLER: Jenny Pazzel					
DATE Signed (MM/DD/YY): 1/31/24					

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Page: 2 of 3

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOL/SOLID SL OIL OL WIPE WP AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							☐ Analysis Test# Y/N	Requested Analysis Filtered (Y/N)								Residual Chlorine (Y/N)										
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol		Other	JOP-257-401	JOP-257-402	JOP-845-401	JOP-PGMP-401														
1	G019S		WT	I-31-24	1001	2	1	1							X																			Project No./ Lab I.D.	24010966-017
2	G019D		WT	I-31-24	1030	2	1	1							X																			24010966-018	
3	G020S		WT	I-30-24	0939	2	1	1							X																			24010966-019	
4	G020D		WT	I-30-24	1000	2	1	1							X																			24010966-020	
5	G021S		WT	I-30-24	0909	2	1	1							X																			24010966-021	
6	G021D		WT	I-30-24	0844	2	1	1							X																			24010966-022	
7	G022S		WT	I-31-24	0830	2	1	1							X																			24010966-023	
8	G022D		WT	I-31-24	0851	2	1	1							X																			24010966-024	
9	G023S		WT	I-31-24	1110	2	1	1							X																			24010966-025	
10	G024S		WT	I-31-24	0927	2	1	1							X																			24010966-026	
11	G051D		WT	I-30-24	1112	2	1	1							X	X																		24010966-027	
12	G052D		WT	I-31-24	908	2	1	1							X	X																		24010966-028	
13	G053D		WT	I-30-24	1252	2	1	1							X	X																		24010966-029	
14	G054D		WT	I-31-24	1111	2	1	1							X	X																		24010966-030	
15	G101_LF		WT	I-31-24	1511	2	1	1							X																			24010966-031	
16	G102		WT	I-31-24	1423	2	1	1							X																			24010966-032	
ADDITIONAL COMMENTS			RELINQUISHED BY / AFFILIATION			DATE		TIME		ACCEPTED BY / AFFILIATION				DATE		TIME		SAMPLE CONDITIONS																	
JOP-24Q1			[Signature]			1/31/24		1930		[Signature]				1/31/24		1930																			

Confidential

24010966-401

CHAIN-OF-CUSTODY / Analytical Request Document

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Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 3 of 3	
Company: Vistra Corp-Joppa		Report To: Brian Voelker		Attention: Brian Voelker		REGULATORY AGENCY NPDES GROUND WATER DRINKING WATER UST RCRA OTHER	
Address: 2100 Portland Road		Copy To: Sam Davies: samantha.davies@vistracorp.com		Company Name: Vistra Corp			
Joppa, IL 62953		Roger Faughn - roger.faughn@vistracorp.com		Address: see Section A			
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:		Site Location	
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:		STATE: IL	
Requested Due Date/TAT: 10 day		Project Number: 2285		Profile #:			

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WA PRODUCT P SOIL/SOLID SL OIL OL PIPE V/P AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test Y/N	Requested Analysis Filtered (Y/N)												Residual Chlorine (Y/N)	Project No./ Lab I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		JOP-257-401	JOP-257-402	JOP-845-401	JOP-PGMP-401																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
JOP-24Q1	Tracy Powell	1/31/24	1930	Smay O'Leary	1/31/24	1930	Y N

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Tracy Powell					
SIGNATURE of SAMPLER: Tracy Powell					
DATE Signed (MM/DD/YY): 1/31/24					

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[illegible]

pH ✓ 9.0719 Gm
2/4/24

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Page: 3 of 3

[illegible]

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples intact (Y/N)
PRINT Name of SAMPLER: Justin Cole	DATE Signed (MM/DD/YY): 2-1-24				
SIGNATURE OF SAMPLER: [Signature]					

March 04, 2024

Eric Bauer
Ramboll
234 W. Florida Street
Fifth Floor
Milwaukee, WI 53204
TEL: (414) 837-3607
FAX: (414) 837-3608



Illinois	100226
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: JOP-24Q1

WorkOrder: 24010967

Dear Eric Bauer:

TEKLAB, INC received 34 samples on 2/1/2024 3:40:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Elizabeth A. Hurley
Director of Customer Service
(618)344-1004 ex 33
ehurley@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24010967

Client Project: JOP-24Q1

Report Date: 04-Mar-24

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Chain of Custody	Appended

Definitions

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24010967

Client Project: JOP-24Q1

Report Date: 04-Mar-24

Abbr Definition

* Analytes on report marked with an asterisk are not NELAP accredited

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.

DNI Did not ignite

DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

TNTC Too numerous to count (> 200 CFU)



Definitions

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24010967

Client Project: JOP-24Q1

Report Date: 04-Mar-24

Qualifiers

# - Unknown hydrocarbon	B - Analyte detected in associated Method Blank
C - RL shown is a Client Requested Quantitation Limit	E - Value above quantitation range
H - Holding times exceeded	I - Associated internal standard was outside method criteria
J - Analyte detected below quantitation limits	M - Manual Integration used to determine area response
ND - Not Detected at the Reporting Limit	R - RPD outside accepted recovery limits
S - Spike Recovery outside recovery limits	T - TIC(Tentatively identified compound)
X - Value exceeds Maximum Contaminant Level	



Case Narrative

<http://www.teklabinc.com/>

Client: Ramboll
Client Project: JOP-24Q1

Work Order: 24010967
Report Date: 04-Mar-24

Cooler Receipt Temp: 1.7 °C

An employee of Teklab, Inc. collected the sample(s).

Ra226/228 analyses were performed by Eurofins St. Louis. See attached report for results and QC.

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com



Accreditations

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24010967

Client Project: JOP-24Q1

Report Date: 04-Mar-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2024	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2024	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-001
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G001D
Collection Date: 01/29/2024 13:12

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:43	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-002
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G002D
Collection Date: 01/29/2024 13:59

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:43	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-003
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G003
Collection Date: 01/30/2024 10:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:53	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-004
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G005
Collection Date: 01/31/2024 12:12

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:53	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-005
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G006
Collection Date: 01/30/2024 12:28

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:53	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-006
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G007
Collection Date: 01/30/2024 11:17

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:54	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-007
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G008
Collection Date: 01/30/2024 14:06

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:54	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-008
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G009
Collection Date: 02/01/2024 10:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:54	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-009
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G010
Collection Date: 01/30/2024 15:07

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:55	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-010
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G011
Collection Date: 01/30/2024 14:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:55	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-011
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G012S
Collection Date: 02/01/2024 11:17

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:55	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-012
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G012D
Collection Date: 02/01/2024 12:04

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:55	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-013
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G013S
Collection Date: 01/31/2024 13:38

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:55	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-014
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G013D
Collection Date: 01/31/2024 14:41

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:56	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-015
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G016S
Collection Date: 02/01/2024 12:37

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:56	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-016
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G018S
Collection Date: 01/31/2024 11:51

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:56	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-017
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G019S
Collection Date: 01/31/2024 10:01

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:56	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-018
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G019D
Collection Date: 01/31/2024 10:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:56	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-019
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G020S
Collection Date: 01/30/2024 9:39

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:57	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-020
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G020D
Collection Date: 01/30/2024 10:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:57	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-021
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G021S
Collection Date: 01/30/2024 9:09

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:51	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-022
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G021D
Collection Date: 01/30/2024 8:44

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:51	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-023
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G022S
Collection Date: 01/31/2024 8:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:51	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-024
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G022D
Collection Date: 01/31/2024 8:51

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:51	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-025
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G023S
Collection Date: 01/31/2024 11:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:51	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-026
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G024S
Collection Date: 01/31/2024 9:27

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:52	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-027
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G051D
Collection Date: 01/30/2024 11:12

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:52	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-028
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G052D
Collection Date: 01/31/2024 9:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:52	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-029
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G053D
Collection Date: 01/30/2024 12:52

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:52	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-030
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G054D
Collection Date: 01/31/2024 11:11

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:52	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-031
Matrix: AQUEOUS

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: Field Blank
Collection Date: 02/01/2024 11:42

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:53	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-032
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G052D Duplicate
Collection Date: 01/31/2024 9:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:53	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-033
Matrix: GROUNDWATER

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: G012S Duplicate
Collection Date: 02/01/2024 11:17

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:51	R343854



Client: Ramboll
Client Project: JOP-24Q1
Lab ID: 24010967-034
Matrix: AQUEOUS

Work Order: 24010967
Report Date: 04-Mar-24
Client Sample ID: Equipment Blank 1
Collection Date: 02/01/2024 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	02/19/2024 11:51	R343854

Sample Summary

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24010967

Client Project: JOP-24Q1

Report Date: 04-Mar-24

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
24010967-001	G001D	Groundwater	1	01/29/2024 13:12
24010967-002	G002D	Groundwater	1	01/29/2024 13:59
24010967-003	G003	Groundwater	1	01/30/2024 10:05
24010967-004	G005	Groundwater	1	01/31/2024 12:12
24010967-005	G006	Groundwater	1	01/30/2024 12:28
24010967-006	G007	Groundwater	1	01/30/2024 11:17
24010967-007	G008	Groundwater	1	01/30/2024 14:06
24010967-008	G009	Groundwater	1	02/01/2024 10:35
24010967-009	G010	Groundwater	1	01/30/2024 15:07
24010967-010	G011	Groundwater	1	01/30/2024 14:08
24010967-011	G012S	Groundwater	1	02/01/2024 11:17
24010967-012	G012D	Groundwater	1	02/01/2024 12:04
24010967-013	G013S	Groundwater	1	01/31/2024 13:38
24010967-014	G013D	Groundwater	1	01/31/2024 14:41
24010967-015	G016S	Groundwater	1	02/01/2024 12:37
24010967-016	G018S	Groundwater	1	01/31/2024 11:51
24010967-017	G019S	Groundwater	1	01/31/2024 10:01
24010967-018	G019D	Groundwater	1	01/31/2024 10:30
24010967-019	G020S	Groundwater	1	01/30/2024 9:39
24010967-020	G020D	Groundwater	1	01/30/2024 10:00
24010967-021	G021S	Groundwater	1	01/30/2024 9:09
24010967-022	G021D	Groundwater	1	01/30/2024 8:44
24010967-023	G022S	Groundwater	1	01/31/2024 8:30
24010967-024	G022D	Groundwater	1	01/31/2024 8:51
24010967-025	G023S	Groundwater	1	01/31/2024 11:10
24010967-026	G024S	Groundwater	1	01/31/2024 9:27
24010967-027	G051D	Groundwater	1	01/30/2024 11:12
24010967-028	G052D	Groundwater	1	01/31/2024 9:08
24010967-029	G053D	Groundwater	1	01/30/2024 12:52
24010967-030	G054D	Groundwater	1	01/31/2024 11:11
24010967-031	Field Blank	Aqueous	1	02/01/2024 11:42
24010967-032	G052D Duplicate	Groundwater	1	01/31/2024 9:08
24010967-033	G012S Duplicate	Groundwater	1	02/01/2024 11:17
24010967-034	Equipment Blank 1	Aqueous	1	02/01/2024 12:00



Receiving Check List

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24010967

Client Project: JOP-24Q1

Report Date: 04-Mar-24

Carrier: Tracy Carroll

Received By: AMD

Completed by:

On:

01-Feb-24

Amber Dilallo

Amber Dilallo

Reviewed by:

On:

02-Feb-24

Ellie Hopkins

Ellie Hopkins

Pages to follow:

Chain of custody

5

Extra pages included

37

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C 1.7

Type of thermal preservation?

None ☐

Ice ☒

Blue Ice ☐

Dry Ice ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☐

Lab ☐

NA ☒

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water – at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

Any No responses must be detailed below or on the COC.

pH strip #90719. - amberdilallo - 2/1/2024 9:16:43 AM

Samples were received on 2/1/24 at 1540 (on ice - 9.3C - LTG3). pH strip #90719. AMD 2/2/24

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 3

[illegible]

PHV 90719 9m2/124

Confidential

24010967401

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 2 of 3	
Company: Vistra Corp-Joppa		Report To: Brian Voelker		Attention: Brian Voelker		REGULATORY AGENCY	
Address: 2100 Portland Road		Copy To: Sam Davies: samantha.davies@vistracorp.com		Company Name: Vistra Corp			
Joppa, IL 62953		Roger Faughn - roger.faughn@vistracorp.com		Address: see Section A		NPDES GROUND WATER DRINKING WATER	
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:		UST RCRA OTHER	
Phone (217) 753-8911 Fax		Project Name:		Project Manager:		Site Location	
Requested Due Date/TAT: 10 day		Project Number: 2285		Profile #:		STATE: IL	

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	COLLECTED	SAMPLE TYPE (G-GRAB C-COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Project No./ Lab I.D.
									Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other						
1	G019S	WT	1-31-24	1001	2	2													24010967-017			
2	G019D	WT	1-31-24	1030	2	2													24010967-018			
3	G020S	WT	1-30-24	0939	2	2													24010967-019			
4	G020D	WT	1-30-24	1000	2	2													24010967-020			
5	G021S	WT	1-30-24	0909	2	2													24010967-021			
6	G021D	WT	1-30-24	0844	2	2													24010967-022			
7	G022S	WT	1-31-24	0830	2	2													24010967-023			
8	G022D	WT	1-31-24	0851	2	2													24010967-024			
9	G023S	WT	1-31-24	1110	2	2													24010967-025			
10	G024S	WT	1-31-24	0927	2	2													24010967-026			
11	G051D	WT	1/31/24	1112	2	2													24010967-027			
12	G052D	WT	1/31/24	908	2	2													24010967-028			
13	G053D	WT	1-30-24	1752	2	2													24010967-029			
14	G054D	WT	1/31/24	1111	2	2													24010967-030			
15	G101_LF		1-31-24	1511															N/A			
16	G102		1-31-24	1423															N/A			

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	SAMPLE CONDITIONS	
JOP-24Q1		[Signature]		1/31/24	1930	[Signature]		1/31/24	1930	Y Z	
Ra226/228, only.											

SAMPLER NAME AND SIGNATURE				Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Tracy Cord							
SIGNATURE of SAMPLER: [Signature]							
DATE Signed (MM/DD/YY): 1/31/24							

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 3 of 3

[illegible]

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
JOP-24Q1 Ra226/228, only.	Kary Carroll	1/31/24	1930	Gina Orellana	1/31/24	1930	>	z		

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples intact (Y/N)
PRINT Name of SAMPLER: Tracy Carroll					
SIGNATURE of SAMPLER: Tracy Carroll	DATE Signed (MM/DD/YY): 1/31/24				

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 3

[illegible]

PH V 90719 Gm 2/4/24

Confidential

24010967
JOP-257-401

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 3 of 3	
Company: Vistra Corp-Joppa		Report To: Brian Voelker		Attention: Brian Voelker		REGULATORY AGENCY NPDES GROUND WATER DRINKING WATER UST RCRA OTHER Site Location: IL STATE:	
Address: 2100 Portland Road		Copy To: Sam Davies: samantha.davies@vistracorp.com		Company Name: Vistra Corp			
Joppa, IL 62953		Roger Faughn - roger.faughn@vistracorp.com		Address: see Section A			
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:			
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:			
Requested Due Date/TAT: 10 day		Project Number: 2285		Profile #			

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL QL WIPE WP AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test Y/N	Requested Analysis Filtered (Y/N)												Residual Chlorine (Y/N)	Project No./ Lab I.D.		
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other																	
1	G105				2-1-24	0915																									N/A		
2	G107																															N/A	
3	G109																															N/A	
4	G111_LF																															N/A	
5	XPW01_pore																															N/A	
6	XPW02_pore																															N/A	
7	XPW03_pore																															N/A	
8	XSG01																															N/A	
9	YSG03																															N/A	
10	Field Blank		WT		2-1-24	1142		2		2								X	X	X												24010967-031	
11	G052D Duplicate		WT					2		2								X	X													24010967-032	
12	G012S Duplicate		WT		2-1-24	1117		2		2										X												24010967-033	
13	Equipment Blank 1		WT		2-1-24	1200		2		2								X	X	X												24010967-034	
14	Equipment Blank 2		WT					2		2								X	X	X												24010967-035	
15	Equipment Blank 3		WT					2		2								X	X	X												24010967-036	
16																																	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS		
JOP-24Q1	J. Colp	2-1	1540	Justin Colp	2/1	1540			
Ra226/228, only.									

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER: Justin Colp		DATE Signed (MM/DD/YYYY): 2-1-24	
SIGNATURE of SAMPLER: Justin Colp			

ANALYTICAL REPORT

PREPARED FOR

Attn: Elizabeth A Hurley
TekLab, Inc
5445 Horseshoe Lake Road
Collinsville, Illinois 62234

Generated 3/1/2024 6:19:33 PM

JOB DESCRIPTION

Radium-226 and Radium-228
24010967

JOB NUMBER

160-53012-1

Job Notes

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

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

Authorization



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3/1/2024 6:19:33 PM

Authorized for release by
Erika Jordan, Project Manager
erika.jordan@et.eurofinsus.com
(314)298-8566

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Client: TekLab, Inc
Project: Radium-226 and Radium-228

Job ID: 160-53012-1

Job ID: 160-53012-1

Eurofins St. Louis

CASE NARRATIVE

Client: TekLab, Inc

Project: 24010967

Report Number: 160-53012-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition, all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method.

Eurofins Environment Testing attests to the validity of the laboratory data generated by Eurofins facilities reported herein. All analyses performed by Eurofins Environment Testing facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins Environment Testing's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

Calculations are performed before rounding to avoid round-off errors in calculated results.

Proper preservation was noted for the methods performed on these samples, unless otherwise detailed below.

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

The matrix for the Method Blank and LCS/LCSD is as close to the samples as can be reasonably achieved. Detailed information can be found in the most current revision of the associated SOP.

The method blank (MB) z-score is within limits, unless stated otherwise below.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.

Reference the chain of custody and receipt report for any variations on receipt conditions.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

Receipt

The samples were received on 2/5/2024 1:20 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved. The temperatures of the 3 coolers at receipt time were 18.6°C, 18.6°C and 18.8°C.

Method 903.0 - Radium-226 (GFPC)

Samples 24010967-001 (160-53012-1), 24010967-002 (160-53012-2), 24010967-003 (160-53012-3), 24010967-004 (160-53012-4), 24010967-005 (160-53012-5), 24010967-006 (160-53012-6), 24010967-007 (160-53012-7), 24010967-008 (160-53012-8), 24010967-009 (160-53012-9), 24010967-010 (160-53012-10), 24010967-011 (160-53012-11), 24010967-012 (160-53012-12), 24010967-013 (160-53012-13), 24010967-014 (160-53012-14), 24010967-015 (160-53012-15), 24010967-016 (160-53012-16), 24010967-017 (160-53012-17), 24010967-018 (160-53012-18), 24010967-019 (160-53012-19), 24010967-020 (160-53012-20), 24010967-021 (160-53012-21), 24010967-022 (160-53012-22), 24010967-023 (160-53012-23), 24010967-024 (160-53012-24), 24010967-025 (160-53012-25), 24010967-026 (160-53012-26), 24010967-027 (160-53012-27), 24010967-028 (160-53012-28), 24010967-029 (160-53012-29), 24010967-030 (160-53012-30), 24010967-031 (160-53012-31), 24010967-032 (160-53012-32), 24010967-033 (160-53012-33) and 24010967-034 (160-53012-34) were analyzed for Radium-226 (GFPC). The samples were prepared on 2/7/2024 and analyzed on 2/29/2024.

The Barium carrier recovery is outside the lower control limit (30%) for the following sample: 24010967-004 (160-53012-4). There

Eurofins St. Louis

Client: TekLab, Inc
Project: Radium-226 and Radium-228

Job ID: 160-53012-1

Job ID: 160-53012-1 (Continued)

Eurofins St. Louis

was physical evidence of matrix interference apparent during the initial preparation of the sample. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference. In addition the detection limit was achieved, so the laboratory does not believe this excursion adversely affects the data.

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

Method 904.0 - Radium-228 (GFPC)

Samples 24010967-001 (160-53012-1), 24010967-002 (160-53012-2), 24010967-003 (160-53012-3), 24010967-004 (160-53012-4), 24010967-005 (160-53012-5), 24010967-006 (160-53012-6), 24010967-007 (160-53012-7), 24010967-008 (160-53012-8), 24010967-009 (160-53012-9), 24010967-010 (160-53012-10), 24010967-011 (160-53012-11), 24010967-012 (160-53012-12), 24010967-013 (160-53012-13), 24010967-014 (160-53012-14), 24010967-015 (160-53012-15), 24010967-016 (160-53012-16), 24010967-017 (160-53012-17), 24010967-018 (160-53012-18), 24010967-019 (160-53012-19), 24010967-020 (160-53012-20), 24010967-021 (160-53012-21), 24010967-022 (160-53012-22), 24010967-023 (160-53012-23), 24010967-024 (160-53012-24), 24010967-025 (160-53012-25), 24010967-026 (160-53012-26), 24010967-027 (160-53012-27), 24010967-028 (160-53012-28), 24010967-029 (160-53012-29), 24010967-030 (160-53012-30), 24010967-031 (160-53012-31), 24010967-032 (160-53012-32), 24010967-033 (160-53012-33) and 24010967-034 (160-53012-34) were analyzed for Radium-228 (GFPC). The samples were prepared on 2/7/2024 and analyzed on 2/19/2024.

Batch 160-647150

The Barium carrier recovery is outside the lower control limit (30%) for the following sample: 24010967-004 (160-53012-4). There was physical evidence of matrix interference apparent during the initial preparation of the sample. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.

The detection goal was not met for the following samples due to the reduced sample volume attributed to the presence of matrix interferences: 24010967-001 (160-53012-1), 24010967-003 (160-53012-3), 24010967-004 (160-53012-4), 24010967-005 (160-53012-5), 24010967-006 (160-53012-6), 24010967-007 (160-53012-7), 24010967-008 (160-53012-8), 24010967-009 (160-53012-9), 24010967-010 (160-53012-10) and 24010967-011 (160-53012-11). Analytical results are reported with the detection limit achieved.

Batch 647152

The detection goal was not met for the following sample due to the reduced sample volume attributed to the presence of matrix interferences: 24010967-027 (160-53012-27). Analytical results are reported with the detection limit achieved.

The detection goal was not met for the following sample(s). The samples and batch QC were prepped at full volume. Matrix interferences are suspected because the method blank achieved the detection goal demonstrating acceptable sample preparation and instrument performance: 24010967-032 (160-53012-32). Analytical results are reported with the detection limit achieved.

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

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

Samples 24010967-001 (160-53012-1), 24010967-002 (160-53012-2), 24010967-003 (160-53012-3), 24010967-004 (160-53012-4), 24010967-005 (160-53012-5), 24010967-006 (160-53012-6), 24010967-007 (160-53012-7), 24010967-008 (160-53012-8), 24010967-009 (160-53012-9), 24010967-010 (160-53012-10), 24010967-011 (160-53012-11), 24010967-012 (160-53012-12), 24010967-013 (160-53012-13), 24010967-014 (160-53012-14), 24010967-015 (160-53012-15), 24010967-016 (160-53012-16), 24010967-017 (160-53012-17), 24010967-018 (160-53012-18), 24010967-019 (160-53012-19), 24010967-020 (160-53012-20), 24010967-021 (160-53012-21), 24010967-022 (160-53012-22), 24010967-023 (160-53012-23), 24010967-024 (160-53012-24), 24010967-025 (160-53012-25), 24010967-026 (160-53012-26), 24010967-027 (160-53012-27), 24010967-028 (160-53012-28), 24010967-029 (160-53012-29), 24010967-030 (160-53012-30), 24010967-031 (160-53012-31), 24010967-032 (160-53012-32), 24010967-033 (160-53012-33) and 24010967-034 (160-53012-34) were analyzed for Combined Radium-226 and Radium-228. The samples were analyzed on 3/1/2024.

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

Eurofins St. Louis

TEKLAB, INC. Chain of Custody

5445 Horseshoe Lake Road, Collinsville, IL 62234 Phone (618) 344-1004 Fax (618) 344-1005

Are the samples chilled? YES ☐ NO ☒ With: ☐ Ice ☐ Blue Ice ☐ Preserved in: ☐ Lab ☐ Field

Teklab Inc

5445 Horseshoe Lake Road
Collinsville, IL 62234

Cooler Temp: Sampler: QC Level:

Comments:
Please analyze for Radium 22/228 per standard GW methods.
Changes to methods must be approved by Teklab, Inc.
Batch QC is required for all analyses requested. Excel EDD requested. IL site.

Project#

Contact: Email:
Requested Due Date: Billing/PO:

Phone:

PLEASE NOTE:

NELAP accreditation is required on the requested analytes and must be documented as such on the final report. If your laboratory does not currently hold a NELAP accreditation for the requested method and/or analytes, please contact Teklab immediately. If your laboratory loses accreditation or is suspended for any analyte/method during the life of the contract, you must contact Teklab immediately.

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix
	24010967-001	1/29/24 1312	HNO3	Groundwater
	24010967-002	1/29/24 1359	HNO3	Groundwater
	24010967-003	1/30/24 1005	HNO3	Groundwater
	24010967-004	1/31/24 1212	HNO3	Groundwater
	24010967-005	1/30/24 1228	HNO3	Groundwater
	24010967-006	1/30/24 1117	HNO3	Groundwater
	24010967-007	1/30/24 1406	HNO3	Groundwater
	24010967-008	2/1/24 1035	HNO3	Groundwater
	24010967-009	1/30/24 1507	HNO3	Groundwater
	24010967-010	1/30/24 1408	HNO3	Groundwater
	24010967-011	2/1/24 1117	HNO3	Groundwater



160-53012-01 Chain of Custody

*Relinquished By: Date/Time:
Received By: Date/Time:

TEKLAB, INC. Chain of Custody

5445 Horseshoe Lake Road, Collinsville, IL 62234 Phone (618) 344-1004 Fax (618) 344-1005

Are the samples chilled? YES ☐ NO ☒ With: ☐ Ice ☐ Blue Ice ☐ Preserved in: ☐ Lab ☐ Field

Teklab Inc

5445 Horseshoe Lake Road
Collinsville, IL 62234

Cooler Temp: Sampler: QC Level:

Comments: **Please Issue reports and invoices via email only**

Please analyze for Radium 22/228 per standard GW methods.

Project# 24010967

Changes to methods must be approved by Teklab, Inc.

Batch QC is required for all analyses requested. Excel EDD requested. IL site.

Contact: Elizabeth Hurley Email: ehurley@teklabinc.com

Requested Due Date: Standard TAT Billing/PO: 35745

Phone: 618 344-1004 ext. 33

PLEASE NOTE:

NELAP accreditation is required on the requested analytes and must be documented as such on the final report. If your laboratory does not currently hold a NELAP accreditation for the requested method and/or analytes, please contact Teklab immediately. If your laboratory loses accreditation or is suspended for any analyte/method during the life of the contract, you must contact Teklab immediately.

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix
	24010967-012	2/1/24 1204	HNO3	Groundwater
	24010967-013	1/31/24 1338	HNO3	Groundwater
	24010967-014	1/31/24 1441	HNO3	Groundwater
	24010967-015	2/1/24 1237	HNO3	Groundwater
	24010967-016	1/31/24 1151	HNO3	Groundwater
	24010967-017	1/31/24 1001	HNO3	Groundwater
	24010967-018	1/31/24 1030	HNO3	Groundwater
	24010967-019	1/30/24 0939	HNO3	Groundwater
	24010967-020	1/30/24 1000	HNO3	Groundwater
	24010967-021	1/30/24 0909	HNO3	Groundwater
	24010967-022	1/30/24 0844	HNO3	Groundwater

*Relinquished By	Date/Time	Received By	Date/Time
<i>Smou...</i>		<i>M. P...</i>	FEB 0 5 2024 1320

TEKLAB, INC. Chain of Custody

5445 Horseshoe Lake Road, Collinsville, IL 62234 Phone (618) 344-1004 Fax (618) 344-1005

Are the samples chilled? YES ☐ NO ☒ With: ☐ Ice ☐ Blue Ice ☐ Preserved in: ☐ Lab ☐ Field

Teklab Inc

5445 Horseshoe Lake Road
Collinsville, IL 62234

Cooler Temp:

Sampler:

QC Level:

Comments: **Please Issue reports and invoices via email only**

Please analyze for Radium 22/228 per standard GW methods.

Changes to methods must be approved by Teklab, Inc.

Batch QC is required for all analyses requested. Excel EDD requested. IL site.

Project#

24010967

Contact:

Elizabeth Hurley

Email:

ehurley@teklabinc.com

Requested Due Date:

Standad TAT

Billing/PO:

35745

Phone:

618 344-1004 ext. 33

PLEASE NOTE:

NELAP accreditation is required on the requested analytes and must be documented as such on the final report. If your laboratory does not currently hold a NELAP accreditation for the requested method and/or analytes, please contact Teklab immediately. If your laboratory loses accreditation or is suspended for any analyte/method during the life of the contract, you must contact Teklab immediately.

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix
	24010967-023	1/31/24 0830	HNO3	Groundwater
	24010967-024	1/31/24 0851	HNO3	Groundwater
	24010967-025	1/31/24 1110	HNO3	Groundwater
	24010967-026	1/31/24 0927	HNO3	Groundwater
	24010967-027	1/30/24 1112	HNO3	Groundwater
	24010967-028	1/31/24 0908	HNO3	Groundwater
	24010967-029	1/30/24 1252	HNO3	Groundwater
	24010967-030	1/31/24 1111	HNO3	Groundwater
	24010967-031	2/1/24 1142	HNO3	Groundwater
	24010967-032	1/31/24 0908	HNO3	Groundwater
	24010967-033	2/1/24 1117	HNO3	Groundwater

Ra226/228

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

*Relinquished By

Sharon Buswell

Date/Time

FEB 26/24

Received By

M. P. Mott

Date/Time

FEB 05 2024 1320

Are the samples chilled?		YES ☐	NO ☒	With: ☐ Ice ☐	☐ Blue Ice	Preserved in: ☐ Lab ☐ Field
Teklab Inc 5445 Horseshoe Lake Road Collinsville, IL 62234						
Project#		24010967		Cooler Temp:		
				Sampler: Teklab Sampler		
				QC Level: 2		
Comments: Please Issue reports and invoices via email only						
Please analyze for Radium 22/228 per standard GW methods.						
Changes to methods must be approved by Teklab, Inc.						
Batch QC is required for all analyses requested. Excel EDD requested. IL site.						
Contact:	Elizabeth Hurley		Email:		ehurley@teklabinc.com	
Requested Due Date:	Standad TAT		Billing/PO:		35745	
				Phone: 618 344-1004 ext. 33		

PLEASE NOTE:

NELAP accreditation is required on the requested analytes and must be documented as such on the final report. If your laboratory does not currently hold a NELAP accreditation for the requested method and/or analytes, please contact Teklab immediately. If your laboratory loses accreditation or is suspended for any analyte/method during the life of the contract, you must contact Teklab immediately.

[illegible]

*Relinquished By	Date/Time	Received By	Date/Time
Shawn Swartz		M. Piro	FEB 05 2024 1320

Teklab maintains a strict policy of client confidentiality and as such does not provide client/sampler information without proper authorization, and proprietary rights, Teklab, Inc. protects clients' confidential information as directed by local, state or federal laws. (Teklab QAM Section 9.1, TNI V1 M2 Section 4.1.5 c)

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Login Sample Receipt Checklist

Client: TekLab, Inc

Job Number: 160-53012-1

SDG Number: 24010967

Login Number: 53012

List Number: 1

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

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

Definitions/Glossary

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND
Job ID: 160-53012-1
SDG: 24010967

Qualifiers

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.
X	Carrier is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

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

Protocol References:

EPA = US Environmental Protection Agency
None = None
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-53012-1	24010967-001	Water	01/29/24 13:12	02/05/24 13:20
160-53012-2	24010967-002	Water	01/29/24 13:59	02/05/24 13:20
160-53012-3	24010967-003	Water	01/30/24 10:05	02/05/24 13:20
160-53012-4	24010967-004	Water	01/31/24 12:12	02/05/24 13:20
160-53012-5	24010967-005	Water	01/30/24 12:28	02/05/24 13:20
160-53012-6	24010967-006	Water	01/30/24 11:17	02/05/24 13:20
160-53012-7	24010967-007	Water	01/30/24 14:06	02/05/24 13:20
160-53012-8	24010967-008	Water	02/01/24 10:35	02/05/24 13:20
160-53012-9	24010967-009	Water	01/30/24 15:07	02/05/24 13:20
160-53012-10	24010967-010	Water	01/30/24 14:08	02/05/24 13:20
160-53012-11	24010967-011	Water	02/01/24 11:17	02/05/24 13:20
160-53012-12	24010967-012	Water	02/01/24 12:04	02/05/24 13:20
160-53012-13	24010967-013	Water	01/31/24 13:38	02/05/24 13:20
160-53012-14	24010967-014	Water	01/31/24 14:41	02/05/24 13:20
160-53012-15	24010967-015	Water	02/01/24 12:37	02/05/24 13:20
160-53012-16	24010967-016	Water	01/31/24 11:51	02/05/24 13:20
160-53012-17	24010967-017	Water	01/31/24 10:01	02/05/24 13:20
160-53012-18	24010967-018	Water	01/31/24 10:30	02/05/24 13:20
160-53012-19	24010967-019	Water	01/30/24 09:39	02/05/24 13:20
160-53012-20	24010967-020	Water	01/30/24 10:00	02/05/24 13:20
160-53012-21	24010967-021	Water	01/30/24 09:09	02/05/24 13:20
160-53012-22	24010967-022	Water	01/30/24 08:44	02/05/24 13:20
160-53012-23	24010967-023	Water	01/31/24 08:30	02/05/24 13:20
160-53012-24	24010967-024	Water	01/31/24 08:51	02/05/24 13:20
160-53012-25	24010967-025	Water	01/31/24 11:10	02/05/24 13:20
160-53012-26	24010967-026	Water	01/31/24 09:27	02/05/24 13:20
160-53012-27	24010967-027	Water	01/30/24 11:12	02/05/24 13:20
160-53012-28	24010967-028	Water	01/31/24 09:08	02/05/24 13:20
160-53012-29	24010967-029	Water	01/30/24 12:52	02/05/24 13:20
160-53012-30	24010967-030	Water	01/31/24 11:11	02/05/24 13:20
160-53012-31	24010967-031	Water	02/01/24 11:42	02/05/24 13:20
160-53012-32	24010967-032	Water	01/31/24 09:08	02/05/24 13:20
160-53012-33	24010967-033	Water	02/01/24 11:17	02/05/24 13:20
160-53012-34	24010967-034	Water	02/01/24 12:00	02/05/24 13:20

Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Client Sample ID: 24010967-001

Lab Sample ID: 160-53012-1

Date Collected: 01/29/24 13:12

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.34		0.377	0.396	1.00	0.330	pCi/L	02/07/24 10:42	02/29/24 18:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	61.3		30 - 110					02/07/24 10:42	02/29/24 18:57	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	4.51	G	1.33	1.39	1.00	1.43	pCi/L	02/07/24 10:51	02/19/24 11:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	61.3		30 - 110					02/07/24 10:51	02/19/24 11:43	1
Y Carrier	83.0		30 - 110					02/07/24 10:51	02/19/24 11:43	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	5.85		1.38	1.45	5.00	1.43	pCi/L		03/01/24 17:17	1

Client Sample ID: 24010967-002

Lab Sample ID: 160-53012-2

Date Collected: 01/29/24 13:59

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.436		0.119	0.125	1.00	0.0890	pCi/L	02/07/24 10:42	02/29/24 18:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.5		30 - 110					02/07/24 10:42	02/29/24 18:58	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.532		0.317	0.321	1.00	0.450	pCi/L	02/07/24 10:51	02/19/24 11:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.5		30 - 110					02/07/24 10:51	02/19/24 11:43	1
Y Carrier	85.6		30 - 110					02/07/24 10:51	02/19/24 11:43	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.968		0.339	0.344	5.00	0.450	pCi/L		03/01/24 17:17	1

Eurofins St. Louis

Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Client Sample ID: 24010967-003

Lab Sample ID: 160-53012-3

Date Collected: 01/30/24 10:05

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.254	U	0.354	0.355	1.00	0.597	pCi/L	02/07/24 10:42	02/29/24 18:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	40.0		30 - 110					02/07/24 10:42	02/29/24 18:58	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.306	U G	1.28	1.28	1.00	2.48	pCi/L	02/07/24 10:51	02/19/24 11:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	40.0		30 - 110					02/07/24 10:51	02/19/24 11:53	1
Y Carrier	87.1		30 - 110					02/07/24 10:51	02/19/24 11:53	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.254	U	1.33	1.33	5.00	2.48	pCi/L		03/01/24 17:17	1

Client Sample ID: 24010967-004

Lab Sample ID: 160-53012-4

Date Collected: 01/31/24 12:12

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.562	U	0.557	0.559	1.00	0.881	pCi/L	02/07/24 10:42	02/29/24 18:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	23.8	X	30 - 110					02/07/24 10:42	02/29/24 18:58	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.81	U G	2.40	2.42	1.00	3.74	pCi/L	02/07/24 10:51	02/19/24 11:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	23.8	X	30 - 110					02/07/24 10:51	02/19/24 11:53	1
Y Carrier	83.4		30 - 110					02/07/24 10:51	02/19/24 11:53	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	3.38	U	2.46	2.48	5.00	3.74	pCi/L		03/01/24 17:17	1

Eurofins St. Louis

Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Client Sample ID: 24010967-005

Lab Sample ID: 160-53012-5

Date Collected: 01/30/24 12:28

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.805		0.341	0.349	1.00	0.368	pCi/L	02/07/24 10:42	02/29/24 18:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	44.0		30 - 110					02/07/24 10:42	02/29/24 18:50	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	4.27	G	1.87	1.91	1.00	2.52	pCi/L	02/07/24 10:51	02/19/24 11:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	44.0		30 - 110					02/07/24 10:51	02/19/24 11:53	1
Y Carrier	79.3		30 - 110					02/07/24 10:51	02/19/24 11:53	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	5.08		1.90	1.94	5.00	2.52	pCi/L		03/01/24 17:17	1

Client Sample ID: 24010967-006

Lab Sample ID: 160-53012-6

Date Collected: 01/30/24 11:17

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.884		0.369	0.377	1.00	0.379	pCi/L	02/07/24 10:42	02/29/24 18:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	39.8		30 - 110					02/07/24 10:42	02/29/24 18:50	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.25	U G	1.73	1.75	1.00	2.67	pCi/L	02/07/24 10:51	02/19/24 11:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	39.8		30 - 110					02/07/24 10:51	02/19/24 11:54	1
Y Carrier	80.4		30 - 110					02/07/24 10:51	02/19/24 11:54	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	3.14		1.77	1.79	5.00	2.67	pCi/L		03/01/24 17:17	1

Eurofins St. Louis

Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Client Sample ID: 24010967-007

Lab Sample ID: 160-53012-7

Date Collected: 01/30/24 14:06

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.441		0.235	0.238	1.00	0.266	pCi/L	02/07/24 10:42	02/29/24 18:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	52.8		30 - 110					02/07/24 10:42	02/29/24 18:52	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.57	G	1.35	1.37	1.00	1.90	pCi/L	02/07/24 10:51	02/19/24 11:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	52.8		30 - 110					02/07/24 10:51	02/19/24 11:54	1
Y Carrier	84.5		30 - 110					02/07/24 10:51	02/19/24 11:54	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	3.01		1.37	1.39	5.00	1.90	pCi/L		03/01/24 17:17	1

Client Sample ID: 24010967-008

Lab Sample ID: 160-53012-8

Date Collected: 02/01/24 10:35

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.647		0.335	0.340	1.00	0.368	pCi/L	02/07/24 10:42	02/29/24 18:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	34.5		30 - 110					02/07/24 10:42	02/29/24 18:51	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.62	U G	1.98	1.99	1.00	3.27	pCi/L	02/07/24 10:51	02/19/24 11:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	34.5		30 - 110					02/07/24 10:51	02/19/24 11:54	1
Y Carrier	75.1		30 - 110					02/07/24 10:51	02/19/24 11:54	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	2.27	U	2.01	2.02	5.00	3.27	pCi/L		03/01/24 17:17	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Client Sample ID: 24010967-009

Lab Sample ID: 160-53012-9

Date Collected: 01/30/24 15:07

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.606		0.291	0.296	1.00	0.344	pCi/L	02/07/24 10:42	02/29/24 18:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	52.0		30 - 110					02/07/24 10:42	02/29/24 18:52	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.62	G	1.32	1.34	1.00	1.82	pCi/L	02/07/24 10:51	02/19/24 11:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	52.0		30 - 110					02/07/24 10:51	02/19/24 11:55	1
Y Carrier	86.7		30 - 110					02/07/24 10:51	02/19/24 11:55	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	3.22		1.35	1.37	5.00	1.82	pCi/L		03/01/24 17:17	1

Client Sample ID: 24010967-010

Lab Sample ID: 160-53012-10

Date Collected: 01/30/24 14:08

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.428		0.296	0.299	1.00	0.395	pCi/L	02/07/24 10:42	02/29/24 18:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	36.8		30 - 110					02/07/24 10:42	02/29/24 18:52	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.90	U G	1.86	1.86	1.00	2.98	pCi/L	02/07/24 10:51	02/19/24 11:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	36.8		30 - 110					02/07/24 10:51	02/19/24 11:55	1
Y Carrier	81.9		30 - 110					02/07/24 10:51	02/19/24 11:55	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	2.33	U	1.88	1.88	5.00	2.98	pCi/L		03/01/24 17:17	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Client Sample ID: 24010967-011

Lab Sample ID: 160-53012-11

Date Collected: 02/01/24 11:17

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0672	U	0.157	0.157	1.00	0.290	pCi/L	02/07/24 10:42	02/29/24 20:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	57.8		30 - 110					02/07/24 10:42	02/29/24 20:36	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.55	U G	1.16	1.17	1.00	1.77	pCi/L	02/07/24 10:51	02/19/24 11:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	57.8		30 - 110					02/07/24 10:51	02/19/24 11:55	1
Y Carrier	77.4		30 - 110					02/07/24 10:51	02/19/24 11:55	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.62	U	1.17	1.18	5.00	1.77	pCi/L		03/01/24 17:17	1

Client Sample ID: 24010967-012

Lab Sample ID: 160-53012-12

Date Collected: 02/01/24 12:04

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.000699	U	0.0415	0.0415	1.00	0.0896	pCi/L	02/07/24 10:42	02/29/24 20:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		30 - 110					02/07/24 10:42	02/29/24 20:36	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.899		0.369	0.378	1.00	0.467	pCi/L	02/07/24 10:51	02/19/24 11:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		30 - 110					02/07/24 10:51	02/19/24 11:55	1
Y Carrier	86.0		30 - 110					02/07/24 10:51	02/19/24 11:55	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.899		0.371	0.380	5.00	0.467	pCi/L		03/01/24 17:17	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Client Sample ID: 24010967-013

Date Collected: 01/31/24 13:38

Date Received: 02/05/24 13:20

Lab Sample ID: 160-53012-13

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0141	U	0.0303	0.0304	1.00	0.0810	pCi/L	02/07/24 10:42	02/29/24 20:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.5		30 - 110					02/07/24 10:42	02/29/24 20:37	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.228	U	0.274	0.275	1.00	0.453	pCi/L	02/07/24 10:51	02/19/24 11:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.5		30 - 110					02/07/24 10:51	02/19/24 11:55	1
Y Carrier	84.9		30 - 110					02/07/24 10:51	02/19/24 11:55	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.228	U	0.276	0.277	5.00	0.453	pCi/L		03/01/24 17:17	1

Client Sample ID: 24010967-014

Date Collected: 01/31/24 14:41

Date Received: 02/05/24 13:20

Lab Sample ID: 160-53012-14

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0590	U	0.0529	0.0532	1.00	0.0769	pCi/L	02/07/24 10:42	02/29/24 20:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.8		30 - 110					02/07/24 10:42	02/29/24 20:37	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.816		0.379	0.386	1.00	0.514	pCi/L	02/07/24 10:51	02/19/24 11:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.8		30 - 110					02/07/24 10:51	02/19/24 11:56	1
Y Carrier	85.6		30 - 110					02/07/24 10:51	02/19/24 11:56	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.875		0.383	0.390	5.00	0.514	pCi/L		03/01/24 17:17	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Client Sample ID: 24010967-015

Date Collected: 02/01/24 12:37

Date Received: 02/05/24 13:20

Lab Sample ID: 160-53012-15

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0678	U	0.0657	0.0660	1.00	0.102	pCi/L	02/07/24 10:42	02/29/24 20:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		30 - 110					02/07/24 10:42	02/29/24 20:37	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.23		0.434	0.449	1.00	0.531	pCi/L	02/07/24 10:51	02/19/24 11:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		30 - 110					02/07/24 10:51	02/19/24 11:56	1
Y Carrier	81.9		30 - 110					02/07/24 10:51	02/19/24 11:56	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.30		0.439	0.454	5.00	0.531	pCi/L		03/01/24 17:17	1

Client Sample ID: 24010967-016

Date Collected: 01/31/24 11:51

Date Received: 02/05/24 13:20

Lab Sample ID: 160-53012-16

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0895	U	0.0794	0.0798	1.00	0.117	pCi/L	02/07/24 10:42	02/29/24 20:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		30 - 110					02/07/24 10:42	02/29/24 20:37	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.46		0.521	0.538	1.00	0.615	pCi/L	02/07/24 10:51	02/19/24 11:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		30 - 110					02/07/24 10:51	02/19/24 11:56	1
Y Carrier	84.5		30 - 110					02/07/24 10:51	02/19/24 11:56	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.55		0.527	0.544	5.00	0.615	pCi/L		03/01/24 17:17	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Client Sample ID: 24010967-017

Date Collected: 01/31/24 10:01

Date Received: 02/05/24 13:20

Lab Sample ID: 160-53012-17

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0997	U	0.0744	0.0749	1.00	0.106	pCi/L	02/07/24 10:42	02/29/24 20:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		30 - 110					02/07/24 10:42	02/29/24 20:48	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.813		0.406	0.413	1.00	0.557	pCi/L	02/07/24 10:51	02/19/24 11:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		30 - 110					02/07/24 10:51	02/19/24 11:56	1
Y Carrier	81.9		30 - 110					02/07/24 10:51	02/19/24 11:56	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.912		0.413	0.420	5.00	0.557	pCi/L		03/01/24 17:17	1

Client Sample ID: 24010967-018

Date Collected: 01/31/24 10:30

Date Received: 02/05/24 13:20

Lab Sample ID: 160-53012-18

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.223		0.0958	0.0978	1.00	0.108	pCi/L	02/07/24 10:42	02/29/24 20:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		30 - 110					02/07/24 10:42	02/29/24 20:48	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.41		0.469	0.487	1.00	0.564	pCi/L	02/07/24 10:51	02/19/24 11:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		30 - 110					02/07/24 10:51	02/19/24 11:56	1
Y Carrier	80.7		30 - 110					02/07/24 10:51	02/19/24 11:56	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.63		0.479	0.497	5.00	0.564	pCi/L		03/01/24 17:17	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Client Sample ID: 24010967-019

Date Collected: 01/30/24 09:39

Date Received: 02/05/24 13:20

Lab Sample ID: 160-53012-19

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.145		0.0754	0.0765	1.00	0.0871	pCi/L	02/07/24 10:52	02/29/24 16:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.8		30 - 110					02/07/24 10:52	02/29/24 16:32	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.03		0.417	0.428	1.00	0.528	pCi/L	02/07/24 10:55	02/19/24 11:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.8		30 - 110					02/07/24 10:55	02/19/24 11:57	1
Y Carrier	77.0		30 - 110					02/07/24 10:55	02/19/24 11:57	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.18		0.424	0.435	5.00	0.528	pCi/L		03/01/24 17:17	1

Client Sample ID: 24010967-020

Date Collected: 01/30/24 10:00

Date Received: 02/05/24 13:20

Lab Sample ID: 160-53012-20

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.240		0.0994	0.102	1.00	0.112	pCi/L	02/07/24 10:52	02/29/24 16:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		30 - 110					02/07/24 10:52	02/29/24 16:32	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.30		0.502	0.516	1.00	0.680	pCi/L	02/07/24 10:55	02/19/24 11:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		30 - 110					02/07/24 10:55	02/19/24 11:57	1
Y Carrier	83.7		30 - 110					02/07/24 10:55	02/19/24 11:57	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.54		0.512	0.526	5.00	0.680	pCi/L		03/01/24 17:17	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Client Sample ID: 24010967-021

Lab Sample ID: 160-53012-21

Date Collected: 01/30/24 09:09

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.142		0.0924	0.0933	1.00	0.130	pCi/L	02/07/24 10:52	02/29/24 16:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.8		30 - 110					02/07/24 10:52	02/29/24 16:33	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.207	U	0.283	0.284	1.00	0.475	pCi/L	02/07/24 10:55	02/19/24 11:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.8		30 - 110					02/07/24 10:55	02/19/24 11:51	1
Y Carrier	87.5		30 - 110					02/07/24 10:55	02/19/24 11:51	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.349	U	0.298	0.299	5.00	0.475	pCi/L		03/01/24 17:17	1

Client Sample ID: 24010967-022

Lab Sample ID: 160-53012-22

Date Collected: 01/30/24 08:44

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.234		0.117	0.119	1.00	0.146	pCi/L	02/07/24 10:52	02/29/24 16:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		30 - 110					02/07/24 10:52	02/29/24 16:26	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.916		0.489	0.496	1.00	0.695	pCi/L	02/07/24 10:55	02/19/24 11:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		30 - 110					02/07/24 10:55	02/19/24 11:51	1
Y Carrier	87.5		30 - 110					02/07/24 10:55	02/19/24 11:51	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.15		0.503	0.510	5.00	0.695	pCi/L		03/01/24 17:17	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Client Sample ID: 24010967-023

Date Collected: 01/31/24 08:30

Date Received: 02/05/24 13:20

Lab Sample ID: 160-53012-23

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.298		0.106	0.110	1.00	0.108	pCi/L	02/07/24 10:52	02/29/24 16:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.8		30 - 110					02/07/24 10:52	02/29/24 16:26	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.671		0.378	0.383	1.00	0.539	pCi/L	02/07/24 10:55	02/19/24 11:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.8		30 - 110					02/07/24 10:55	02/19/24 11:51	1
Y Carrier	84.9		30 - 110					02/07/24 10:55	02/19/24 11:51	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.969		0.393	0.398	5.00	0.539	pCi/L		03/01/24 17:17	1

Client Sample ID: 24010967-024

Date Collected: 01/31/24 08:51

Date Received: 02/05/24 13:20

Lab Sample ID: 160-53012-24

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.217		0.0986	0.101	1.00	0.119	pCi/L	02/07/24 10:52	02/29/24 16:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.3		30 - 110					02/07/24 10:52	02/29/24 16:27	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.537		0.354	0.357	1.00	0.527	pCi/L	02/07/24 10:55	02/19/24 11:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.3		30 - 110					02/07/24 10:55	02/19/24 11:51	1
Y Carrier	83.7		30 - 110					02/07/24 10:55	02/19/24 11:51	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.754		0.367	0.371	5.00	0.527	pCi/L		03/01/24 17:17	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Client Sample ID: 24010967-025

Date Collected: 01/31/24 11:10

Date Received: 02/05/24 13:20

Lab Sample ID: 160-53012-25

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.103	U	0.0776	0.0781	1.00	0.113	pCi/L	02/07/24 10:52	02/29/24 16:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.5		30 - 110					02/07/24 10:52	02/29/24 16:27	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.610		0.353	0.357	1.00	0.508	pCi/L	02/07/24 10:55	02/19/24 11:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.5		30 - 110					02/07/24 10:55	02/19/24 11:51	1
Y Carrier	86.0		30 - 110					02/07/24 10:55	02/19/24 11:51	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.713		0.361	0.365	5.00	0.508	pCi/L		03/01/24 17:17	1

Client Sample ID: 24010967-026

Date Collected: 01/31/24 09:27

Date Received: 02/05/24 13:20

Lab Sample ID: 160-53012-26

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0786	U	0.108	0.108	1.00	0.182	pCi/L	02/07/24 10:52	02/29/24 16:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.8		30 - 110					02/07/24 10:52	02/29/24 16:27	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.502	U	0.529	0.531	1.00	0.857	pCi/L	02/07/24 10:55	02/19/24 11:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.8		30 - 110					02/07/24 10:55	02/19/24 11:52	1
Y Carrier	85.2		30 - 110					02/07/24 10:55	02/19/24 11:52	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.580	U	0.540	0.542	5.00	0.857	pCi/L		03/01/24 17:17	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Client Sample ID: 24010967-027

Date Collected: 01/30/24 11:12

Date Received: 02/05/24 13:20

Lab Sample ID: 160-53012-27

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0943	U	0.205	0.205	1.00	0.372	pCi/L	02/07/24 10:52	02/29/24 16:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	46.5		30 - 110					02/07/24 10:52	02/29/24 16:31	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.66	U G	1.30	1.31	1.00	2.01	pCi/L	02/07/24 10:55	02/19/24 11:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	46.5		30 - 110					02/07/24 10:55	02/19/24 11:52	1
Y Carrier	86.0		30 - 110					02/07/24 10:55	02/19/24 11:52	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.75	U	1.32	1.33	5.00	2.01	pCi/L		03/01/24 17:17	1

Client Sample ID: 24010967-028

Date Collected: 01/31/24 09:08

Date Received: 02/05/24 13:20

Lab Sample ID: 160-53012-28

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.425		0.128	0.133	1.00	0.116	pCi/L	02/07/24 10:52	02/29/24 16:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.3		30 - 110					02/07/24 10:52	02/29/24 16:31	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.36		0.490	0.506	1.00	0.617	pCi/L	02/07/24 10:55	02/19/24 11:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.3		30 - 110					02/07/24 10:55	02/19/24 11:52	1
Y Carrier	83.0		30 - 110					02/07/24 10:55	02/19/24 11:52	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.79		0.506	0.523	5.00	0.617	pCi/L		03/01/24 17:17	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Client Sample ID: 24010967-029

Lab Sample ID: 160-53012-29

Date Collected: 01/30/24 12:52

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.300		0.133	0.136	1.00	0.155	pCi/L	02/07/24 10:52	02/29/24 16:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					02/07/24 10:52	02/29/24 16:31	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.498	U	0.459	0.461	1.00	0.728	pCi/L	02/07/24 10:55	02/19/24 11:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					02/07/24 10:55	02/19/24 11:52	1
Y Carrier	84.1		30 - 110					02/07/24 10:55	02/19/24 11:52	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.798		0.478	0.481	5.00	0.728	pCi/L		03/01/24 17:17	1

Client Sample ID: 24010967-030

Lab Sample ID: 160-53012-30

Date Collected: 01/31/24 11:11

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.137		0.0901	0.0910	1.00	0.126	pCi/L	02/07/24 10:52	02/29/24 16:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		30 - 110					02/07/24 10:52	02/29/24 16:31	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.455	U	0.347	0.349	1.00	0.528	pCi/L	02/07/24 10:55	02/19/24 11:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		30 - 110					02/07/24 10:55	02/19/24 11:52	1
Y Carrier	80.0		30 - 110					02/07/24 10:55	02/19/24 11:52	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.592		0.359	0.361	5.00	0.528	pCi/L		03/01/24 17:17	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Client Sample ID: 24010967-031

Lab Sample ID: 160-53012-31

Date Collected: 02/01/24 11:42

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0258	U	0.0704	0.0705	1.00	0.152	pCi/L	02/07/24 10:52	02/29/24 16:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.3		30 - 110					02/07/24 10:52	02/29/24 16:32	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.608		0.392	0.396	1.00	0.568	pCi/L	02/07/24 10:55	02/19/24 11:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.3		30 - 110					02/07/24 10:55	02/19/24 11:53	1
Y Carrier	82.6		30 - 110					02/07/24 10:55	02/19/24 11:53	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.608		0.398	0.402	5.00	0.568	pCi/L		03/01/24 17:17	1

Client Sample ID: 24010967-032

Lab Sample ID: 160-53012-32

Date Collected: 01/31/24 09:08

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.428		0.153	0.158	1.00	0.153	pCi/L	02/07/24 10:52	02/29/24 18:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	57.8		30 - 110					02/07/24 10:52	02/29/24 18:51	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.08	G	0.694	0.701	1.00	1.04	pCi/L	02/07/24 10:55	02/19/24 11:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	57.8		30 - 110					02/07/24 10:55	02/19/24 11:53	1
Y Carrier	77.4		30 - 110					02/07/24 10:55	02/19/24 11:53	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.51		0.711	0.719	5.00	1.04	pCi/L		03/01/24 17:17	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Client Sample ID: 24010967-033

Lab Sample ID: 160-53012-33

Date Collected: 02/01/24 11:17

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.173	U	0.145	0.146	1.00	0.216	pCi/L	02/07/24 10:52	02/29/24 18:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.0		30 - 110					02/07/24 10:52	02/29/24 18:51	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.69		0.703	0.719	1.00	0.873	pCi/L	02/07/24 10:55	02/19/24 11:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.0		30 - 110					02/07/24 10:55	02/19/24 11:51	1
Y Carrier	84.9		30 - 110					02/07/24 10:55	02/19/24 11:51	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.86		0.718	0.734	5.00	0.873	pCi/L		03/01/24 17:17	1

Client Sample ID: 24010967-034

Lab Sample ID: 160-53012-34

Date Collected: 02/01/24 12:00

Matrix: Water

Date Received: 02/05/24 13:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0354	U	0.0636	0.0637	1.00	0.112	pCi/L	02/07/24 10:52	02/29/24 18:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.5		30 - 110					02/07/24 10:52	02/29/24 18:52	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.539		0.338	0.342	1.00	0.490	pCi/L	02/07/24 10:55	02/19/24 11:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.5		30 - 110					02/07/24 10:55	02/19/24 11:51	1
Y Carrier	82.2		30 - 110					02/07/24 10:55	02/19/24 11:51	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.574		0.344	0.348	5.00	0.490	pCi/L		03/01/24 17:17	1

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QC Sample Results

APPENDIX A.

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Job ID: 160-53012-1
SDG: 24010967

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-647146/1-A
Matrix: Water
Analysis Batch: 650277

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 647146

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.008505	U	0.0468	0.0468	1.00	0.0938	pCi/L	02/07/24 10:42	02/29/24 18:57	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.3		30 - 110					02/07/24 10:42	02/29/24 18:57	1

Lab Sample ID: LCS 160-647146/2-A
Matrix: Water
Analysis Batch: 650277

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 647146

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	11.60		1.19	1.00	0.0970	pCi/L	102	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	99.0		30 - 110						

Lab Sample ID: 160-53012-2 DU
Matrix: Water
Analysis Batch: 650277

Client Sample ID: 24010967-002
Prep Type: Total/NA
Prep Batch: 647146

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.436		0.2492		0.100	1.00	0.107	pCi/L	0.83	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	101		30 - 110							

Lab Sample ID: MB 160-647151/1-A
Matrix: Water
Analysis Batch: 650277

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 647151

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04744	U	0.0611	0.0612	1.00	0.101	pCi/L	02/07/24 10:52	02/29/24 16:32	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		30 - 110					02/07/24 10:52	02/29/24 16:32	1

Lab Sample ID: LCS 160-647151/2-A
Matrix: Water
Analysis Batch: 650277

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 647151

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	10.84		1.13	1.00	0.112	pCi/L	96	75 - 125

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QC Sample Results

APPENDIX A.

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Job ID: 160-53012-1
SDG: 24010967

Method: 903.0 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-647151/2-A
Matrix: Water
Analysis Batch: 650277

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 647151

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	98.5		30 - 110

Lab Sample ID: 160-53012-20 DU
Matrix: Water
Analysis Batch: 650277

Client Sample ID: 24010967-020
Prep Type: Total/NA
Prep Batch: 647151

	Sample	Sample		DU	DU	Total						RER
Analyte	Result	Qual		Result	Qual	Uncert.	RL	MDC	Unit		RER	Limit
Radium-226	0.240			0.2562		(2σ+/-) 0.114	1.00	0.139	pCi/L		0.07	1
	DU	DU										
Carrier	%Yield	Qualifier	Limits									
Ba Carrier	97.8		30 - 110									

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-647150/1-A
Matrix: Water
Analysis Batch: 648636

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 647150

	MB	MB		Count	Total							
Analyte	Result	Qualifier		Uncert.	Uncert.	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Radium-228	0.006506	U		0.277	0.277	1.00	0.518	pCi/L	02/07/24 10:51	02/19/24 11:42	1	
	MB	MB										
Carrier	%Yield	Qualifier	Limits						Prepared	Analyzed	Dil Fac	
Ba Carrier	93.3		30 - 110						02/07/24 10:51	02/19/24 11:42	1	
Y Carrier	83.4		30 - 110						02/07/24 10:51	02/19/24 11:42	1	

Lab Sample ID: LCS 160-647150/2-A
Matrix: Water
Analysis Batch: 648636

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 647150

		Spike	LCS	LCS	Total						%Rec	
Analyte		Added	Result	Qual	Uncert.	RL	MDC	Unit	%Rec	Limits		
Radium-228		9.20	9.449		(2σ+/-) 1.24	1.00	0.420	pCi/L	103	75 - 125		
	LCS	LCS										
Carrier	%Yield	Qualifier	Limits									
Ba Carrier	99.0		30 - 110									
Y Carrier	88.6		30 - 110									

Lab Sample ID: 160-53012-2 DU
Matrix: Water
Analysis Batch: 648636

Client Sample ID: 24010967-002
Prep Type: Total/NA
Prep Batch: 647150

	Sample	Sample		DU	DU	Total						RER
Analyte	Result	Qual		Result	Qual	Uncert.	RL	MDC	Unit		RER	Limit
Radium-228	0.532			0.4490	U	(2σ+/-) 0.309	1.00	0.454	pCi/L		0.13	1

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QC Sample Results

APPENDIX A.

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Job ID: 160-53012-1
SDG: 24010967

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 160-53012-2 DU
Matrix: Water
Analysis Batch: 648636

Client Sample ID: 24010967-002
Prep Type: Total/NA
Prep Batch: 647150

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	101		30 - 110
Y Carrier	83.0		30 - 110

Lab Sample ID: MB 160-647152/1-A
Matrix: Water
Analysis Batch: 648636

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 647152

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert.	Uncert.						
Radium-228	0.5416	U	(2σ+/-)	(2σ+/-)	1.00	0.822	pCi/L	02/07/24 10:55	02/19/24 15:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		30 - 110					02/07/24 10:55	02/19/24 15:41	1
Y Carrier	86.7		30 - 110					02/07/24 10:55	02/19/24 15:41	1

Lab Sample ID: LCS 160-647152/2-A
Matrix: Water
Analysis Batch: 648806

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 647152

Analyte	Spike	LCS	LCS	Total	RL	MDC	Unit	%Rec	%Rec
	Added	Result	Qual	Uncert.				Limits	
Radium-228	9.20	10.14		(2σ+/-)	1.00	0.542	pCi/L	110	75 - 125
Carrier	%Yield	Qualifier	Limits						
Ba Carrier	98.5		30 - 110						
Y Carrier	89.0		30 - 110						

Lab Sample ID: 160-53012-20 DU
Matrix: Water
Analysis Batch: 648807

Client Sample ID: 24010967-020
Prep Type: Total/NA
Prep Batch: 647152

Analyte	Sample	Sample	DU	DU	Total	RL	MDC	Unit	RER	RER
	Result	Qual	Result	Qual	Uncert.				Limit	
Radium-228	1.30		0.7322		(2σ+/-)	1.00	0.509	pCi/L	0.64	1
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	97.8		30 - 110							
Y Carrier	87.1		30 - 110							

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QC Association Summary

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
LOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Rad

Prep Batch: 647146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-53012-1	24010967-001	Total/NA	Water	PrecSep-21	
160-53012-2	24010967-002	Total/NA	Water	PrecSep-21	
160-53012-3	24010967-003	Total/NA	Water	PrecSep-21	
160-53012-4	24010967-004	Total/NA	Water	PrecSep-21	
160-53012-5	24010967-005	Total/NA	Water	PrecSep-21	
160-53012-6	24010967-006	Total/NA	Water	PrecSep-21	
160-53012-7	24010967-007	Total/NA	Water	PrecSep-21	
160-53012-8	24010967-008	Total/NA	Water	PrecSep-21	
160-53012-9	24010967-009	Total/NA	Water	PrecSep-21	
160-53012-10	24010967-010	Total/NA	Water	PrecSep-21	
160-53012-11	24010967-011	Total/NA	Water	PrecSep-21	
160-53012-12	24010967-012	Total/NA	Water	PrecSep-21	
160-53012-13	24010967-013	Total/NA	Water	PrecSep-21	
160-53012-14	24010967-014	Total/NA	Water	PrecSep-21	
160-53012-15	24010967-015	Total/NA	Water	PrecSep-21	
160-53012-16	24010967-016	Total/NA	Water	PrecSep-21	
160-53012-17	24010967-017	Total/NA	Water	PrecSep-21	
160-53012-18	24010967-018	Total/NA	Water	PrecSep-21	
MB 160-647146/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-647146/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
160-53012-2 DU	24010967-002	Total/NA	Water	PrecSep-21	

Prep Batch: 647150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-53012-1	24010967-001	Total/NA	Water	PrecSep_0	
160-53012-2	24010967-002	Total/NA	Water	PrecSep_0	
160-53012-3	24010967-003	Total/NA	Water	PrecSep_0	
160-53012-4	24010967-004	Total/NA	Water	PrecSep_0	
160-53012-5	24010967-005	Total/NA	Water	PrecSep_0	
160-53012-6	24010967-006	Total/NA	Water	PrecSep_0	
160-53012-7	24010967-007	Total/NA	Water	PrecSep_0	
160-53012-8	24010967-008	Total/NA	Water	PrecSep_0	
160-53012-9	24010967-009	Total/NA	Water	PrecSep_0	
160-53012-10	24010967-010	Total/NA	Water	PrecSep_0	
160-53012-11	24010967-011	Total/NA	Water	PrecSep_0	
160-53012-12	24010967-012	Total/NA	Water	PrecSep_0	
160-53012-13	24010967-013	Total/NA	Water	PrecSep_0	
160-53012-14	24010967-014	Total/NA	Water	PrecSep_0	
160-53012-15	24010967-015	Total/NA	Water	PrecSep_0	
160-53012-16	24010967-016	Total/NA	Water	PrecSep_0	
160-53012-17	24010967-017	Total/NA	Water	PrecSep_0	
160-53012-18	24010967-018	Total/NA	Water	PrecSep_0	
MB 160-647150/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-647150/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
160-53012-2 DU	24010967-002	Total/NA	Water	PrecSep_0	

Prep Batch: 647151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-53012-19	24010967-019	Total/NA	Water	PrecSep-21	
160-53012-20	24010967-020	Total/NA	Water	PrecSep-21	
160-53012-21	24010967-021	Total/NA	Water	PrecSep-21	

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QC Association Summary

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
LOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Rad (Continued)

Prep Batch: 647151 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-53012-22	24010967-022	Total/NA	Water	PrecSep-21	
160-53012-23	24010967-023	Total/NA	Water	PrecSep-21	
160-53012-24	24010967-024	Total/NA	Water	PrecSep-21	
160-53012-25	24010967-025	Total/NA	Water	PrecSep-21	
160-53012-26	24010967-026	Total/NA	Water	PrecSep-21	
160-53012-27	24010967-027	Total/NA	Water	PrecSep-21	
160-53012-28	24010967-028	Total/NA	Water	PrecSep-21	
160-53012-29	24010967-029	Total/NA	Water	PrecSep-21	
160-53012-30	24010967-030	Total/NA	Water	PrecSep-21	
160-53012-31	24010967-031	Total/NA	Water	PrecSep-21	
160-53012-32	24010967-032	Total/NA	Water	PrecSep-21	
160-53012-33	24010967-033	Total/NA	Water	PrecSep-21	
160-53012-34	24010967-034	Total/NA	Water	PrecSep-21	
MB 160-647151/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-647151/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
160-53012-20 DU	24010967-020	Total/NA	Water	PrecSep-21	

Prep Batch: 647152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-53012-19	24010967-019	Total/NA	Water	PrecSep_0	
160-53012-20	24010967-020	Total/NA	Water	PrecSep_0	
160-53012-21	24010967-021	Total/NA	Water	PrecSep_0	
160-53012-22	24010967-022	Total/NA	Water	PrecSep_0	
160-53012-23	24010967-023	Total/NA	Water	PrecSep_0	
160-53012-24	24010967-024	Total/NA	Water	PrecSep_0	
160-53012-25	24010967-025	Total/NA	Water	PrecSep_0	
160-53012-26	24010967-026	Total/NA	Water	PrecSep_0	
160-53012-27	24010967-027	Total/NA	Water	PrecSep_0	
160-53012-28	24010967-028	Total/NA	Water	PrecSep_0	
160-53012-29	24010967-029	Total/NA	Water	PrecSep_0	
160-53012-30	24010967-030	Total/NA	Water	PrecSep_0	
160-53012-31	24010967-031	Total/NA	Water	PrecSep_0	
160-53012-32	24010967-032	Total/NA	Water	PrecSep_0	
160-53012-33	24010967-033	Total/NA	Water	PrecSep_0	
160-53012-34	24010967-034	Total/NA	Water	PrecSep_0	
MB 160-647152/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-647152/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
160-53012-20 DU	24010967-020	Total/NA	Water	PrecSep_0	

Tracer/Carrier Summary

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)			
		Ba			
Lab Sample ID	Client Sample ID	(30-110)			
160-53012-1	24010967-001	61.3			
160-53012-2	24010967-002	92.5			
160-53012-2 DU	24010967-002	101			
160-53012-3	24010967-003	40.0			
160-53012-4	24010967-004	23.8 X			
160-53012-5	24010967-005	44.0			
160-53012-6	24010967-006	39.8			
160-53012-7	24010967-007	52.8			
160-53012-8	24010967-008	34.5			
160-53012-9	24010967-009	52.0			
160-53012-10	24010967-010	36.8			
160-53012-11	24010967-011	57.8			
160-53012-12	24010967-012	95.0			
160-53012-13	24010967-013	95.5			
160-53012-14	24010967-014	94.8			
160-53012-15	24010967-015	96.8			
160-53012-16	24010967-016	94.3			
160-53012-17	24010967-017	90.8			
160-53012-18	24010967-018	93.5			
160-53012-19	24010967-019	95.8			
160-53012-20	24010967-020	95.0			
160-53012-20 DU	24010967-020	97.8			
160-53012-21	24010967-021	97.8			
160-53012-22	24010967-022	93.5			
160-53012-23	24010967-023	88.8			
160-53012-24	24010967-024	93.3			
160-53012-25	24010967-025	95.5			
160-53012-26	24010967-026	73.8			
160-53012-27	24010967-027	46.5			
160-53012-28	24010967-028	85.3			
160-53012-29	24010967-029	88.0			
160-53012-30	24010967-030	89.5			
160-53012-31	24010967-031	76.3			
160-53012-32	24010967-032	57.8			
160-53012-33	24010967-033	93.0			
160-53012-34	24010967-034	92.5			
LCS 160-647146/2-A	Lab Control Sample	99.0			
LCS 160-647151/2-A	Lab Control Sample	98.5			
MB 160-647146/1-A	Method Blank	93.3			
MB 160-647151/1-A	Method Blank	85.8			

Tracer/Carrier Legend

Ba = Ba Carrier

Tracer/Carrier Summary

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53012-1
SDG: 24010967

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
160-53012-1	24010967-001	61.3	83.0
160-53012-2	24010967-002	92.5	85.6
160-53012-2 DU	24010967-002	101	83.0
160-53012-3	24010967-003	40.0	87.1
160-53012-4	24010967-004	23.8 X	83.4
160-53012-5	24010967-005	44.0	79.3
160-53012-6	24010967-006	39.8	80.4
160-53012-7	24010967-007	52.8	84.5
160-53012-8	24010967-008	34.5	75.1
160-53012-9	24010967-009	52.0	86.7
160-53012-10	24010967-010	36.8	81.9
160-53012-11	24010967-011	57.8	77.4
160-53012-12	24010967-012	95.0	86.0
160-53012-13	24010967-013	95.5	84.9
160-53012-14	24010967-014	94.8	85.6
160-53012-15	24010967-015	96.8	81.9
160-53012-16	24010967-016	94.3	84.5
160-53012-17	24010967-017	90.8	81.9
160-53012-18	24010967-018	93.5	80.7
160-53012-19	24010967-019	95.8	77.0
160-53012-20	24010967-020	95.0	83.7
160-53012-20 DU	24010967-020	97.8	87.1
160-53012-21	24010967-021	97.8	87.5
160-53012-22	24010967-022	93.5	87.5
160-53012-23	24010967-023	88.8	84.9
160-53012-24	24010967-024	93.3	83.7
160-53012-25	24010967-025	95.5	86.0
160-53012-26	24010967-026	73.8	85.2
160-53012-27	24010967-027	46.5	86.0
160-53012-28	24010967-028	85.3	83.0
160-53012-29	24010967-029	88.0	84.1
160-53012-30	24010967-030	89.5	80.0
160-53012-31	24010967-031	76.3	82.6
160-53012-32	24010967-032	57.8	77.4
160-53012-33	24010967-033	93.0	84.9
160-53012-34	24010967-034	92.5	82.2
LCS 160-647150/2-A	Lab Control Sample	99.0	88.6
LCS 160-647152/2-A	Lab Control Sample	98.5	89.0
MB 160-647150/1-A	Method Blank	93.3	83.4
MB 160-647152/1-A	Method Blank	85.8	86.7

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Summary

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

WO Sample	Well ID	Program/ Sample Type	Weather				Well Condition				
			Temp (°F)	Precipitation	Wind Direction	Sky	Well Pad	Casing	Protective Cover	Reference Mark/ ID	Well Locked
001	G001D	Groundwater Sample	39.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
002	G002D	Groundwater Sample	39.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
003	G003	Groundwater Sample	39.0	Light	W	Partly cloudy	Good	Good	Good	Yes	Yes
004	G005	Groundwater Sample	44.0	None	S	Clear	Good	Good	Good	Yes	Yes
005	G006	Groundwater Sample	49.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
006	G007	Groundwater Sample	44.0	Light	E	Partly cloudy	Good	Good	Good	Yes	Yes
007	G008	Groundwater Sample	50.0	None	SE	Partly cloudy	Good	Good	Good	Yes	Yes
008	G009	Groundwater Sample	40.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
009	G010	Groundwater Sample	51.0	None	SE	Partly cloudy	Good	Good	Good	Yes	Yes
010	G011	Groundwater Sample	39.0	None	W	Partly cloudy	Good	Good	Good	Yes	Yes
011	G012S	Groundwater Sample	46.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
012	G012D	Groundwater Sample	52.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
013	G013S	Groundwater Sample	44.0	None	S	Cloudy	Good	Good	Good	Yes	Yes
014	G013D	Groundwater Sample	44.0	None	S	Cloudy	Good	Good	Good	Yes	Yes
015	G016S	Groundwater Sample	52.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
016	G018S	Groundwater Sample	45.0	None	S	Partly cloudy	Good	Good	Good	Yes	Yes
017	G019S	Groundwater Sample	40.0	None	S	Partly cloudy	Good	Good	Good	Yes	Yes
018	G019D	Groundwater Sample	40.0	None	S	Partly cloudy	Good	Good	Good	Yes	Yes
019	G020S	Groundwater Sample	42.0	Light	NE	Partly cloudy	Good	Good	Good	Yes	Yes
020	G020D	Groundwater Sample	42.0	Light	NE	Partly cloudy	Good	Good	Good	Yes	Yes
021	G021S	Groundwater Sample	40.0	Light	NE	Partly cloudy	Good	Good	Good	Yes	Yes
022	G021D	Groundwater Sample	38.0	Light	NE	Partly cloudy	Good	Good	Good	Yes	Yes
023	G022S	Groundwater Sample	37.0	None	S	Partly cloudy	Good	Good	Good	Yes	Yes
024	G022D	Groundwater Sample	37.0	None	S	Partly cloudy	Good	Good	Good	Yes	Yes
025	G023S	Groundwater Sample	43.0	None	S	Partly cloudy	Good	Good	Good	Yes	Yes
026	G024S	Groundwater Sample	39.0	None	S	Partly cloudy	Good	Good	Good	Yes	Yes
027	G051D	Groundwater Sample	39.0	None	W	Partly cloudy	Good	Good	Good	Yes	Yes
028	G052D	Groundwater Sample	39.0	None	S	Cloudy	Good	Good	Good	Yes	Yes
029	G053D	Groundwater Sample	50.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
030	G054D	Groundwater Sample	44.0	None	S	Cloudy	Good	Good	Good	Yes	Yes
031	G101_LF	Groundwater Sample	49.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
032	G102	Groundwater Sample	49.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
033	G105	Groundwater Sample	48.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
034	G107	Groundwater Sample	35.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
035	G109	Groundwater Sample	48.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
036	G111_LF	Groundwater Sample	47.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
037	XPW01_pore	Groundwater Sample	39.0	None	W	Partly cloudy	Good	Good	Good	Yes	Yes
038	XPW02_pore	Groundwater Sample	41.0	None	S	Partly cloudy	Good	Good	Good	Yes	Yes
039	XPW03_pore	Groundwater Sample	39.0	None	W	Partly cloudy	Good	Good	Good	Yes	Yes
040	XSG01	DTW Only	41.0	None	S	Partly cloudy					
041	YSG03	DTW Only	38.0	None	S	Partly cloudy					
042	Field Blank	QA/QC Sample	35.0	None	N	Partly cloudy					

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Summary

JOPPA POWER PLANT, EAST ASH POND

LIMS Workorder: 24010966

Joppa- 1Q 2024

JOP-257-401

Technician(s): DC, JC, TC, BG

WO Sample	Well ID	Program/ Sample Type	Weather				Well Condition				
			Temp (*F)	Precipitation	Wind Direction	Sky	Well Pad	Casing	Protective Cover	Reference Mark/ ID	Well Locked
043	G052D Duplicate	QA/QC Sample	39.0	None	S	Cloudy	Good	Good	Good	Yes	Yes
044	G012S Duplicate	QA/QC Sample	46.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
045	Equipment Blank 1	QA/QC Sample	46.0	None	N	Partly cloudy					

Site Sampling Event: Joppa 1Q24

LIMS Workorder: 24010966

Groundwater Sampling Summary

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

WO Sample	Well ID	GW Level Measurement				Purge Activities							
		Sampler Initials	Date/Time	DTW (ft)	DTB (ft)	Sampler Initials	Purge Date	Purge Start Time	Purge End Time	Purging Device	Well Diameter (in)	Actual Volume Purged (L)	Purge Rate (mL/min)
001	G001D	DC	1/29/24 12:48	44.51	67.10	TAC	1/29/2024	12:52	13:12	Bladder Pump	2"	5.0	250.0
002	G002D	DC	1/29/24 13:41	44.33	75.20	TAC	1/29/2024	13:42	13:59	Bladder Pump	2"	4.5	264.7
003	G003	DC	1/30/24 8:11	37.95	68.03	TAC	1/30/2024	08:15	10:05	Bladder Pump	2"	16.0	145.5
004	G005	TAC	1/31/24 11:45	43.95	62.92	TAC	1/31/2024	11:46	12:12	Bladder Pump	2"	2.5	96.2
005	G006	JC	1/30/24 11:29	40.66	62.76	JC	1/30/2024	11:31	12:28	Bladder Pump	2"	10.0	175.4
006	G007	JC	1/30/24 10:17	40.70	87.64	JC	1/30/2024	10:18	11:17	Bladder Pump	2"	11.0	186.4
007	G008	JC	1/30/24 13:05	30.82	86.82	JC	1/30/2024	13:06	14:06	Bladder Pump	2"	10.0	166.7
008	G009	JC	2/1/24 9:34	37.64	72.51	JC	2/1/2024	09:35	10:35	Bladder Pump	2"	10.0	166.7
009	G010	JC	1/30/24 14:14	38.75	73.04	JC	1/30/2024	14:15	15:07	Bladder Pump	2"	9.0	173.1
010	G011	DC	1/30/24 13:26	47.38	68.90	TAC	1/30/2024	13:27	14:08	Bladder Pump	2"	9.0	219.5
011	G012S	JC	2/1/24 11:02	46.90	72.78	JC	2/1/2024	11:03	11:17	Bladder Pump	2"	2.0	142.9
012	G012D	JC	2/1/24 11:47	46.91	92.96	JC	2/1/2024	11:49	12:04	Bladder Pump	2"	2.0	133.3
013	G013S	DC	1/31/24 13:14	40.00	62.66	TAC	1/31/2024	13:15	13:38	Bladder Pump	2"	4.0	173.9
014	G013D	TAC	1/31/24 13:45	41.92	92.85	TAC	1/31/2024	14:04	14:41	Bladder Pump	2"	6.0	162.2
015	G016S	JC	2/1/24 12:21	40.19	62.72	JC	2/1/2024	12:22	12:37	Bladder Pump	2"	2.0	133.3
016	G018S	JC	1/31/24 11:39	38.29		JC	1/31/2024	11:40	11:51	Bladder Pump	2"	2.5	227.3
017	G019S	JC	1/31/24 9:49	44.40	71.45	JC	1/31/2024	09:49	10:01	Bladder Pump	2"	2.5	208.3
018	G019D	JC	1/31/24 10:02	44.26	96.34	JC	1/31/2024	10:13	10:30	Bladder Pump	2"	2.5	147.1
019	G020S	JC	1/30/24 9:28	40.65	72.68	JC	1/30/2024	09:28	09:39	Bladder Pump	2"	2.0	181.8
020	G020D	JC	1/30/24 9:40	41.16	98.07	JC	1/30/2024	09:45	10:00	Bladder Pump	2"	2.0	133.3
021	G021S	JC	1/30/24 8:48	41.98	73.08	JC	1/30/2024	08:57	09:09	Bladder Pump	2"	2.0	166.7
022	G021D	JC	1/30/24 8:22	41.32	103.00	JC	1/30/2024	08:30	08:44	Bladder Pump	2"	2.5	178.6
023	G022S	JC	1/31/24 8:18	41.36	74.79	JC	1/31/2024	08:19	08:30	Bladder Pump	2"	2.5	227.3
024	G022D	JC	1/31/24 8:37	45.82	116.71	JC	1/31/2024	08:40	08:51	Bladder Pump	2"	2.0	181.8
025	G023S	JC	1/31/24 10:56	45.32		JC	1/31/2024	10:57	11:10	Bladder Pump	2"	2.0	153.8
026	G024S	JC	1/31/24 9:12	45.04		JC	1/31/2024	09:13	09:27	Bladder Pump	2"	2.0	142.9
027	G051D	DC	1/30/24 10:43	44.36	62.70	TAC	1/30/2024	10:45	11:12	Bladder Pump	2"	5.5	203.7
028	G052D	TAC	1/31/24 8:34	29.74	82.50	TAC	1/31/2024	08:37	09:08	Bladder Pump	2"	4.0	129.0
029	G053D	JC	1/30/24 12:42	38.46	60.60	JC	1/30/2024	12:41	12:52	Bladder Pump	2"	2.5	227.3
030	G054D	DC	1/31/24 10:18	39.58	83.50	TAC	1/31/2024	10:20	11:11	Bladder Pump	2"	9.0	176.5
031	G101_LF	JC	1/31/24 14:34	47.10	58.00	JC	1/31/2024	14:35	15:11	Bladder Pump	2"	6.0	166.7
032	G102	JC	1/31/24 14:04	59.63	70.70	JC	1/31/2024	14:04	14:23	Bladder Pump	2"	3.0	157.9
033	G105	JC	1/31/24 13:32	56.19	70.90	JC	1/31/2024	13:33	13:55	Bladder Pump	2"	3.0	136.4
034	G107	JC	2/1/24 8:13	55.20	71.00	JC	2/1/2024	08:15	09:15	Submersible Pump	2"	16.0	266.7
035	G109	JC	1/31/24 13:06	52.78	68.50	JC	1/31/2024	13:07	13:25	Bladder Pump	2"	3.0	166.7
036	G111_LF	JC	1/31/24 12:47	50.41	70.90	JC	1/31/2024	12:48	12:59	Bladder Pump	2"	3.0	272.7
037	XPW01_pore	DC	1/30/24 11:48	2.16	56.31	TAC	1/30/2024	11:52	12:14	Bladder Pump	2"	5.5	250.0
038	XPW02_pore	DC	1/29/24 14:30	2.13	32.52	TAC	1/29/2024	14:31	14:51	Bladder Pump	2"	5.0	250.0
039	XPW03_pore	DC	1/30/24 12:32	12.97	39.57	TAC	1/30/2024	12:34	13:02	Bladder Pump	2"	7.0	250.0
040	XSG01	JC	1/29/24 14:51	N/A									
041	YSG03	JC	1/29/24 11:52	40.53									
042	Field Blank												

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Summary

JOPPA POWER PLANT, EAST ASH POND

LIMS Workorder: 24010966

Joppa- 1Q 2024

JOP-257-401

Technician(s): DC, JC, TC, BG

WO Sample	Well ID	GW Level Measurement				Purge Activities							
		Sampler Initials	Date/Time	DTW (ft)	DTB (ft)	Sampler Initials	Purge Date	Purge Start Time	Purge End Time	Purging Device	Well Diameter (in)	Actual Volume Purged (L)	Purge Rate (mL/min)
043	G052D Duplicate	TAC	1/31/24 8:34	29.74	82.50	TAC	1/31/2024	08:37	09:08	Bladder Pump	2"	4.0	129.0
044	G012S Duplicate	JC	2/1/24 11:02	46.90	72.78	JC	2/1/2024	11:03	11:17	Bladder Pump	2"	2.0	142.9
045	Equipment Blank 1												

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Summary

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

WO Sample	Well ID	Sampling Activities and Observations									
		Sampler Initials	Date	Time	Sampling Method	Field Filtered	Appearance	Odor	Color	Post-Sample DTW (ft)	Drawdown (ft)
001	G001D	DC	01/29/24	13:12	Low Flow	No	Clear	None	None	44.51	0
002	G002D	DC	01/29/24	13:59	Low Flow	No	Clear	None	None	44.39	0.06
003	G003	DC	01/30/24	10:05	Low Flow	No	Cloudy	None	Rust	39.02	1.07
004	G005	DC	01/31/24	12:12	Low Flow	No	Clear	None	None	45.12	1.17
005	G006	JC	01/30/24	12:28	Low Flow	No	Cloudy	None	rust	41.00	0.34
006	G007	JC	01/30/24	11:17	Low Flow	No	Cloudy	None	rust	41.09	0.39
007	G008	JC	01/30/24	14:06	Low Flow	No	Cloudy	None	rust	30.82	0
008	G009	JC	02/01/24	10:35	Low Flow	No	Cloudy	None	rust	37.64	0
009	G010	JC	01/30/24	15:07	Low Flow	No	Cloudy	None	rust	38.75	0
010	G011	DC	01/30/24	14:08	Low Flow	No	Cloudy	None	rust	47.58	0.2
011	G012S	JC	02/01/24	11:17	Low Flow	No	Slightly cloudy	None	none	47.00	0.1
012	G012D	JC	02/01/24	12:04	Low Flow	No	Clear	None	none	46.98	0.07
013	G013S	DC	01/31/24	13:38	Low Flow	No	Clear	None	None	39.97	-0.03
014	G013D	DC	01/31/24	14:41	Low Flow	No	Clear	None	None	41.89	-0.03
015	G016S	JC	02/01/24	12:37	Low Flow	No	Clear	None	none	40.19	0
016	G018S	JC	01/31/24	11:51	Low Flow	No	Clear	None	none	38.29	0
017	G019S	JC	01/31/24	10:01	Low Flow	No	Clear	None	none	44.40	0
018	G019D	JC	01/31/24	10:30	Low Flow	No	Clear	None	none	44.26	0
019	G020S	JC	01/30/24	09:39	Low Flow	No	Clear	None	none	40.65	0
020	G020D	JC	01/30/24	10:00	Low Flow	No	Clear	None	none	41.16	0
021	G021S	JC	01/30/24	09:09	Low Flow	No	Clear	None	none	41.98	0
022	G021D	JC	01/30/24	08:44	Low Flow	No	Clear	None	none	41.57	0.25
023	G022S	JC	01/31/24	08:30	Low Flow	No	Clear	None	none	41.36	0
024	G022D	JC	01/31/24	08:51	Low Flow	No	Clear	None	none	45.82	0
025	G023S	JC	01/31/24	11:10	Low Flow	No	Clear	None	none	45.32	0
026	G024S	JC	01/31/24	09:27	Low Flow	No	Clear	None	none	45.04	0
027	G051D	DC	01/30/24	11:12	Low Flow	No	Clear	None	None	44.59	0.23
028	G052D	DC	01/31/24	09:08	Low Flow	No	Clear	Slight	None	36.22	6.48
029	G053D	JC	01/30/24	12:52	Low Flow	No	Clear	None	none	38.46	0
030	G054D	DC	01/31/24	11:11	Low Flow	No	Clear	None	None	43.57	3.99
031	G101_LF	JC	01/31/24	15:11	Low Flow	No	Slightly cloudy	None	none	48.56	1.46
032	G102	JC	01/31/24	14:23	Low Flow	No	Clear	None	none	61.20	1.57
033	G105	JC	01/31/24	13:55	Low Flow	No	Clear	None	none	56.19	0
034	G107	JC	02/01/24	09:15	Low Flow	No	Slightly cloudy	None	none	58.98	3.78
035	G109	JC	01/31/24	13:25	Low Flow	No	Clear	None	none	55.81	3.03
036	G111_LF	JC	01/31/24	12:59	Low Flow	No	Clear	None	none	50.41	0
037	XPW01_pore	DC	01/30/24	12:14	Low Flow	No	Clear	None	None	4.52	2.36
038	XPW02_pore	DC	01/29/24	14:51	Low Flow	No	Clear	None	None	2.19	0.06
039	XPW03_pore	DC	01/30/24	13:02	Low Flow	No	Clear	None	None	23.32	10.35
040	XSG01										
041	YSG03										
042	Field Blank	JC	02/01/24	11:42							

Site Sampling Event: Joppa 1Q24

LIMS Workorder: 24010966

Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary

Joppa- 1Q 2024

WO Sample	Well ID	Sampling Activities and Observations									
		Sampler Initials	Date	Time	Sampling Method	Field Filtered	Appearance	Odor	Color	Post-Sample DTW (ft)	Drawdown (ft)
043	G052D Duplicate	DC	01/31/24	09:08	Low Flow	No	Clear	Slight	None	36.22	6.48
044	G012S Duplicate	JC	02/01/24	11:17	Low Flow	No	Slightly cloudy	None	none	47.00	0.1
045	Equipment Blank 1	JC	02/01/24	12:00							

Site Sampling Event: Joppa 1Q24

LIMS Workorder: 24010966

Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary

Joppa- 1Q 2024

WO Sample	Well ID	COMMENTS
001	G001D	
002	G002D	
003	G003	
004	G005	
005	G006	
006	G007	
007	G008	
008	G009	
009	G010	
010	G011	
011	G012S	
012	G012D	
013	G013S	
014	G013D	
015	G016S	
016	G018S	
017	G019S	
018	G019D	
019	G020S	
020	G020D	
021	G021S	
022	G021D	
023	G022S	
024	G022D	
025	G023S	
026	G024S	
027	G051D	
028	G052D	
029	G053D	
030	G054D	
031	G101_LF	
032	G102	
033	G105	
034	G107	
035	G109	
036	G111_LF	
037	XPW01_pore	
038	XPW02_pore	
039	XPW03_pore	
040	XSG01	Water below bottom of in-place measuring stick
041	YSG03	
042	Field Blank	

Site Sampling Event: Joppa 1Q24

LIMS Workorder: 24010966

Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary

Joppa- 1Q 2024

WO Sample	Well ID	COMMENTS
043	G052D Duplicate	
044	G012S Duplicate	
045	Equipment Blank 1	Blank from submersible pump

Site Sampling Event: Joppa 1Q24

Stabilized Field Parameters Summary

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	LIMS ID
G001D	1/29/2024	13:12	15.0	59.0	6.45	440.3	1.10	17.11	147.4	44.51	24010966-001A
G002D	1/29/2024	13:59	13.8	56.8	6.42	336.6	2.34	2.95	151.0	44.33	24010966-002A
G003	1/30/2024	10:05	14.2	57.6	6.28	399.2	3.90	339.46	158.7	37.95	24010966-003A
G005	1/31/2024	12:12	15.4	59.7	6.41	538.5	1.29	10.20	89.5	43.95	24010966-004A
G006	1/30/2024	12:28	13.5	56.3	6.56	573.0	1.25	277.42	150.0	40.66	24010966-005A
G007	1/30/2024	11:17	14.3	57.7	6.33	710.3	0.97	276.07	156.3	40.70	24010966-006A
G008	1/30/2024	14:06	14.6	58.3	6.94	735.4	0.77	162.19	137.0	30.82	24010966-007A
G009	2/1/2024	10:35	16.0	60.8	6.03	593.9	2.48	346.90	161.4	37.64	24010966-008A
G010	1/30/2024	15:07	14.1	57.4	6.37	815.7	2.23	311.35	158.0	38.75	24010966-009A
G011	1/30/2024	14:08	15.6	60.1	5.97	558.4	1.38	177.11	126.8	47.38	24010966-010A
G012S	2/1/2024	11:17	14.0	57.2	6.51	547.1	3.78	21.10	147.5	46.90	24010966-011A
G012D	2/1/2024	12:04	14.2	57.6	6.59	548.6	2.71	22.41	145.5	46.91	24010966-012A
G013S	1/31/2024	13:38	14.2	57.6	6.53	549.3	0.95	11.70	127.5	40.00	24010966-013A
G013D	1/31/2024	14:41	14.5	58.1	6.57	547.1	2.23	1.61	137.1	41.92	24010966-014A
G016S	2/1/2024	12:37	14.3	57.7	6.64	752.4	2.76	9.29	146.2	40.19	24010966-015A
G018S	1/31/2024	11:51	15.2	59.4	6.55	391.5	3.84	8.27	151.6	38.29	24010966-016A
G019S	1/31/2024	10:01	14.8	58.6	6.43	501.9	4.78	5.28	153.1	44.40	24010966-017A
G019D	1/31/2024	10:30	15.0	59.0	6.56	401.7	4.65	6.70	151.1	44.26	24010966-018A
G020S	1/30/2024	9:39	13.9	57.0	6.52	470.4	3.91	3.37	150.5	40.65	24010966-019A
G020D	1/30/2024	10:00	12.9	55.2	6.71	489.7	3.02	3.46	149.7	41.16	24010966-020A
G021S	1/30/2024	9:09	13.0	55.4	6.48	750.7	3.24	4.00	162.1	41.98	24010966-021A
G021D	1/30/2024	8:44	12.9	55.2	6.41	616.1	2.23	21.74	158.0	41.32	24010966-022A
G022S	1/31/2024	8:30	14.6	58.3	6.18	408.7	4.34	13.62	146.9	41.36	24010966-023A
G022D	1/31/2024	8:51	14.5	58.1	6.43	302.0	2.22	6.16	152.3	45.82	24010966-024A
G023S	1/31/2024	11:10	14.5	58.1	6.54	334.9	4.72	16.42	149.9	45.32	24010966-025A
G024S	1/31/2024	9:27	14.9	58.8	6.98	211.3	2.83	13.81	137.6	45.04	24010966-026A
G051D	1/30/2024	11:12	15.6	60.1	5.49	341.2	3.54	54.34	188.2	44.36	24010966-027A
G052D	1/31/2024	9:08	11.8	53.2	6.30	368.0	1.51	2.51	-55.6	29.74	24010966-028A
G053D	1/30/2024	12:52	15.0	59.0	6.49	395.8	1.78	7.12	150.2	38.46	24010966-029A
G054D	1/31/2024	11:11	14.7	58.5	6.48	687.5	0.73	6.88	17.5	39.58	24010966-030A
G101_LF	1/31/2024	15:11	14.6	58.3	6.47	258.8	6.77	55.18	154.5	47.10	24010966-031A
G102	1/31/2024	14:23	15.3	59.5	6.27	245.3	7.64	10.17	157.9	59.63	24010966-032A
G105	1/31/2024	13:55	15.9	60.6	6.05	322.1	7.88	8.88	165.3	56.19	24010966-033A
G107	2/1/2024	9:15	14.8	58.6	6.35	661.0	3.12	29.04	164.7	55.20	24010966-034A
G109	1/31/2024	13:25	16.3	61.3	6.35	221.7	5.83	11.50	149.8	52.78	24010966-035A
G111_LF	1/31/2024	12:59	16.3	61.3	6.62	296.4	4.86	7.61	140.0	50.41	24010966-036A
XPW01_pore	1/30/2024	12:14	16.1	61.0	8.44	799.6	0.43	4.79	-30.8	2.16	24010966-037A
XPW02_pore	1/29/2024	14:51	15.3	59.5	7.72	4,118.2	0.48	13.32	-54.7	2.13	24010966-038A
XPW03_pore	1/30/2024	13:02	16.3	61.3	10.85	583.9	1.87	2.37	2.0	12.97	24010966-039A
XSG01	1/29/2024	14:51	DTW Only							N/A	24010966-040A
YSG03	1/29/2024	11:52	DTW Only							40.53	24010966-041A
Field Blank	2/1/2024	11:42	QA/QC Sample								24010966-042A

Site Sampling Event: Joppa 1Q24

Stabilized Field Parameters Summary

JOPPA POWER PLANT, EAST ASH POND

LIMS Workorder: 24010966

Joppa- 1Q 2024

JOP-257-401

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	LIMS ID
G052D Duplicate	1/31/2024	9:08	11.8	53.2	6.30	368.0	1.51	2.51	-55.6	29.74	24010966-043A
G012S Duplicate	2/1/2024	11:17	14.0	57.2	6.51	547.1	3.78	21.10	147.5	46.90	24010966-044A
Equipment Blank 1	2/1/2024	12:00	QA/QC Sample								24010966-045A

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G001D	1/29/2024	13:03	44.51	14.8	58.6	6.49	437.8	1.12	19.60	149.8
G001D	1/29/2024	13:06	44.51	14.9	58.8	6.47	436.9	0.90	12.54	148.7
G001D	1/29/2024	13:09	44.51	15.0	59.0	6.46	437.0	1.05	10.13	147.9
G001D	1/29/2024	13:12	44.51	15.0	59.0	6.45	440.3	1.10	17.11	147.4

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G002D	1/29/2024	13:50	44.33	13.8	56.8	6.50	337.9	2.70	5.11	150.4
G002D	1/29/2024	13:53	44.33	13.8	56.8	6.44	337.7	2.48	4.12	151.0
G002D	1/29/2024	13:56	44.33	13.8	56.8	6.43	337.5	2.40	3.32	151.1
G002D	1/29/2024	13:59	44.33	13.8	56.8	6.42	336.6	2.34	2.95	151.0

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G003	1/30/2024	9:35	37.95	13.6	56.5	6.25	427.6	3.72	553.35	150.8
G003	1/30/2024	9:38	37.95	13.5	56.3	6.26	421.5	3.72	542.10	151.6
G003	1/30/2024	9:41	37.95	13.8	56.8	6.26	418.0	3.73	513.93	152.4
G003	1/30/2024	9:44	37.95	13.6	56.5	6.26	415.9	3.74	479.52	153.3
G003	1/30/2024	9:47	37.95	13.7	56.7	6.27	412.7	3.75	476.16	154.1
G003	1/30/2024	9:50	37.95	13.8	56.8	6.26	409.5	3.80	488.46	155.5
G003	1/30/2024	9:53	37.95	13.9	57.0	6.28	408.6	4.32	397.67	156.0
G003	1/30/2024	9:56	37.95	14.0	57.2	6.28	405.4	4.10	409.94	156.6
G003	1/30/2024	9:59	37.95	14.0	57.2	6.28	403.4	3.98	372.11	157.4
G003	1/30/2024	10:02	37.95	14.1	57.4	6.28	401.1	3.92	360.21	158.1
G003	1/30/2024	10:05	37.95	14.2	57.6	6.28	399.2	3.90	339.46	158.7

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G005	1/31/2024	12:00	43.95	15.3	59.5	6.43	538.3	2.43	19.06	91.3
G005	1/31/2024	12:03	43.95	15.3	59.5	6.42	540.6	2.01	13.10	90.6
G005	1/31/2024	12:06	43.95	15.4	59.7	6.41	539.2	1.66	10.52	90.0
G005	1/31/2024	12:09	43.95	15.3	59.5	6.41	540.5	1.44	10.45	89.6
G005	1/31/2024	12:12	43.95	15.4	59.7	6.41	538.5	1.29	10.20	89.5

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G006	1/30/2024	12:13	40.66	13.7	56.7	6.55	569.8	1.48	428.18	150.9
G006	1/30/2024	12:16	40.66	13.8	56.8	6.55	571.0	1.43	383.06	150.7
G006	1/30/2024	12:19	40.66	13.9	57.0	6.55	572.2	1.37	367.04	150.5
G006	1/30/2024	12:22	40.66	13.6	56.5	6.55	572.1	1.33	328.71	150.3
G006	1/30/2024	12:25	40.66	13.8	56.8	6.55	572.3	1.29	290.07	150.1
G006	1/30/2024	12:28	40.66	13.5	56.3	6.56	573.0	1.25	277.42	150.0

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G007	1/30/2024	10:50	40.70	14.1	57.4	6.29	689.2	1.32	539.11	158.0
G007	1/30/2024	10:53	40.70	14.1	57.4	6.30	695.4	1.26	478.94	157.7
G007	1/30/2024	10:56	40.70	14.0	57.2	6.31	699.7	1.21	460.47	157.5
G007	1/30/2024	10:59	40.70	14.1	57.4	6.31	702.9	1.16	419.79	157.3
G007	1/30/2024	11:02	40.70	14.1	57.4	6.32	704.2	1.12	381.64	157.2
G007	1/30/2024	11:05	40.70	14.2	57.6	6.32	707.4	1.08	354.10	157.0
G007	1/30/2024	11:08	40.70	14.2	57.6	6.32	707.8	1.05	340.37	156.8
G007	1/30/2024	11:11	40.70	14.2	57.6	6.33	708.4	1.02	312.93	156.6
G007	1/30/2024	11:14	40.70	14.3	57.7	6.33	709.5	1.00	291.49	156.5
G007	1/30/2024	11:17	40.70	14.3	57.7	6.33	710.3	0.97	276.07	156.3

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G008	1/30/2024	13:45	30.82	14.6	58.3	6.93	731.2	0.86	309.42	140.3
G008	1/30/2024	13:48	30.82	14.7	58.5	6.93	731.7	0.84	281.90	139.8
G008	1/30/2024	13:51	30.82	14.6	58.3	6.93	732.9	0.83	252.11	139.3
G008	1/30/2024	13:54	30.82	14.6	58.3	6.93	732.3	0.82	227.21	138.8
G008	1/30/2024	13:57	30.82	14.6	58.3	6.93	734.3	0.80	208.53	138.4
G008	1/30/2024	14:00	30.82	14.6	58.3	6.93	734.3	0.79	188.16	137.9
G008	1/30/2024	14:03	30.82	14.6	58.3	6.94	734.8	0.78	173.96	137.4
G008	1/30/2024	14:06	30.82	14.6	58.3	6.94	735.4	0.77	162.19	137.0

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G009	2/1/2024	10:08	37.64	15.6	60.1	6.06	586.4	2.75	620.31	162.0
G009	2/1/2024	10:11	37.64	15.6	60.1	6.05	587.4	2.70	580.81	162.0
G009	2/1/2024	10:14	37.64	15.7	60.3	6.05	588.8	2.65	535.08	161.9
G009	2/1/2024	10:17	37.64	15.7	60.3	6.04	589.8	2.60	497.09	162.0
G009	2/1/2024	10:20	37.64	15.7	60.3	6.04	590.4	2.61	468.75	162.0
G009	2/1/2024	10:23	37.64	15.8	60.4	6.04	590.7	2.55	447.61	161.8
G009	2/1/2024	10:26	37.64	15.8	60.4	6.04	591.9	2.50	409.81	161.7
G009	2/1/2024	10:29	37.64	15.8	60.4	6.03	592.2	2.47	400.03	161.7
G009	2/1/2024	10:32	37.64	15.9	60.6	6.04	593.1	2.48	365.35	161.4
G009	2/1/2024	10:35	37.64	16.0	60.8	6.03	593.9	2.48	346.90	161.4

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G010	1/30/2024	14:43	38.75	14.2	57.6	6.39	820.3	3.07	532.82	158.2
G010	1/30/2024	14:46	38.75	14.2	57.6	6.38	819.9	2.90	475.19	158.2
G010	1/30/2024	14:49	38.75	14.3	57.7	6.38	819.6	2.75	427.82	158.2
G010	1/30/2024	14:52	38.75	14.2	57.6	6.38	819.4	2.63	420.74	158.2
G010	1/30/2024	14:55	38.75	14.5	58.1	6.37	819.2	2.51	393.93	158.1
G010	1/30/2024	14:58	38.75	14.5	58.1	6.37	819.7	2.42	358.17	158.1
G010	1/30/2024	15:01	38.75	14.3	57.7	6.37	818.7	2.35	347.52	158.0
G010	1/30/2024	15:04	38.75	14.2	57.6	6.37	816.6	2.28	315.18	158.0
G010	1/30/2024	15:07	38.75	14.1	57.4	6.37	815.7	2.23	311.35	158.0

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G011	1/30/2024	13:38	47.38	15.5	59.9	6.33	782.5	3.66	15.94	105.6
G011	1/30/2024	13:41	47.38	15.5	59.9	6.15	792.1	2.92	18.28	112.8
G011	1/30/2024	13:44	47.38	15.5	59.9	6.07	778.2	2.56	127.07	117.3
G011	1/30/2024	13:47	47.38	15.4	59.7	6.03	710.6	2.20	406.01	119.5
G011	1/30/2024	13:50	47.38	15.6	60.1	6.01	658.4	1.92	464.15	121.1
G011	1/30/2024	13:53	47.38	15.6	60.1	6.00	630.0	1.73	486.93	122.4
G011	1/30/2024	13:56	47.38	15.6	60.1	5.99	613.9	1.62	425.57	123.5
G011	1/30/2024	13:59	47.38	15.6	60.1	5.98	598.6	1.55	377.33	124.5
G011	1/30/2024	14:02	47.38	15.5	59.9	5.98	584.3	1.49	298.40	125.3
G011	1/30/2024	14:05	47.38	15.6	60.1	5.97	564.5	1.45	213.49	126.1
G011	1/30/2024	14:08	47.38	15.6	60.1	5.97	558.4	1.38	177.11	126.8

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G012S	2/1/2024	11:11	46.90	13.6	56.5	6.66	546.2	6.35	21.14	144.1
G012S	2/1/2024	11:14	46.90	13.9	57.0	6.55	546.7	4.78	20.98	146.8
G012S	2/1/2024	11:17	46.90	14.0	57.2	6.51	547.1	3.78	21.10	147.5

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G012D	2/1/2024	11:52	46.91	13.9	57.0	6.74	548.0	6.94	13.12	144.3
G012D	2/1/2024	11:55	46.91	14.2	57.6	6.67	549.8	5.07	16.73	144.8
G012D	2/1/2024	11:58	46.91	14.2	57.6	6.63	549.6	4.03	18.50	145.1
G012D	2/1/2024	12:01	46.91	14.3	57.7	6.61	548.8	3.25	20.58	145.4
G012D	2/1/2024	12:04	46.91	14.2	57.6	6.59	548.6	2.71	22.41	145.5

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G013S	1/31/2024	13:29	40.00	14.3	57.7	6.56	550.1	1.36	7.32	128.7
G013S	1/31/2024	13:32	40.00	14.3	57.7	6.55	550.9	1.15	8.56	128.5
G013S	1/31/2024	13:35	40.00	14.3	57.7	6.54	550.0	1.03	9.87	128.1
G013S	1/31/2024	13:38	40.00	14.2	57.6	6.53	549.3	0.95	11.70	127.5

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G013D	1/31/2024	14:29	41.92	14.3	57.7	6.58	548.2	2.49	3.74	138.4
G013D	1/31/2024	14:32	41.92	14.5	58.1	6.58	547.8	2.42	1.92	138.1
G013D	1/31/2024	14:35	41.92	14.4	57.9	6.57	548.7	2.21	2.08	137.8
G013D	1/31/2024	14:38	41.92	14.3	57.7	6.57	547.4	2.16	1.21	137.4
G013D	1/31/2024	14:41	41.92	14.5	58.1	6.57	547.1	2.23	1.61	137.1

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G016S	2/1/2024	12:28	40.19	14.4	57.9	6.67	746.7	5.55	19.22	144.9
G016S	2/1/2024	12:31	40.19	14.3	57.7	6.65	750.6	4.35	17.30	146.1
G016S	2/1/2024	12:34	40.19	14.3	57.7	6.64	752.3	3.29	9.85	146.2
G016S	2/1/2024	12:37	40.19	14.3	57.7	6.64	752.4	2.76	9.29	146.2

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G018S	1/31/2024	11:45	38.29	15.2	59.4	6.77	392.3	4.90	32.37	148.9
G018S	1/31/2024	11:48	38.29	15.2	59.4	6.61	392.4	4.17	14.74	151.0
G018S	1/31/2024	11:51	38.29	15.2	59.4	6.55	391.5	3.84	8.27	151.6

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G019S	1/31/2024	9:55	44.40	14.8	58.6	6.67	502.4	6.29	5.06	148.0
G019S	1/31/2024	9:58	44.40	14.7	58.5	6.51	502.4	5.35	5.79	151.5
G019S	1/31/2024	10:01	44.40	14.8	58.6	6.43	501.9	4.78	5.28	153.1

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G019D	1/31/2024	10:24	44.26	15.0	59.0	6.71	402.9	6.94	5.87	148.4
G019D	1/31/2024	10:27	44.26	15.0	59.0	6.60	401.8	5.45	6.53	150.4
G019D	1/31/2024	10:30	44.26	15.0	59.0	6.56	401.7	4.65	6.70	151.1

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G020S	1/30/2024	9:33	40.65	13.9	57.0	6.61	473.3	6.38	3.94	146.5
G020S	1/30/2024	9:36	40.65	13.9	57.0	6.54	470.6	4.62	3.98	149.5
G020S	1/30/2024	9:39	40.65	13.9	57.0	6.52	470.4	3.91	3.37	150.5

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G020D	1/30/2024	9:54	41.16	12.4	54.3	6.80	480.1	5.99	4.51	149.4
G020D	1/30/2024	9:57	41.16	12.8	55.0	6.73	486.5	3.89	4.33	150.0
G020D	1/30/2024	10:00	41.16	12.9	55.2	6.71	489.7	3.02	3.46	149.7

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G021S	1/30/2024	9:03	41.98	12.5	54.5	6.77	721.9	6.82	3.90	159.7
G021S	1/30/2024	9:06	41.98	12.9	55.2	6.55	745.7	4.39	3.71	162.0
G021S	1/30/2024	9:09	41.98	13.0	55.4	6.48	750.7	3.24	4.00	162.1

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G021D	1/30/2024	8:35	41.32	12.3	54.1	6.08	614.5	6.84	4.42	159.1
G021D	1/30/2024	8:38	41.32	12.8	55.0	6.22	614.1	3.90	19.58	160.4
G021D	1/30/2024	8:41	41.32	12.8	55.0	6.32	616.2	2.80	20.44	160.2
G021D	1/30/2024	8:44	41.32	12.9	55.2	6.41	616.1	2.23	21.74	158.0

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G022S	1/31/2024	8:24	41.36	14.1	57.4	6.05	418.1	6.60	8.64	137.1
G022S	1/31/2024	8:27	41.36	14.5	58.1	6.14	408.9	5.07	12.46	142.7
G022S	1/31/2024	8:30	41.36	14.6	58.3	6.18	408.7	4.34	13.62	146.9

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G022D	1/31/2024	8:45	45.82	14.4	57.9	6.65	375.3	4.97	4.71	146.6
G022D	1/31/2024	8:48	45.82	14.5	58.1	6.53	338.0	2.97	5.72	149.7
G022D	1/31/2024	8:51	45.82	14.5	58.1	6.43	302.0	2.22	6.16	152.3

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G023S	1/31/2024	11:04	45.32	14.6	58.3	6.70	332.0	5.46	20.93	145.9
G023S	1/31/2024	11:07	45.32	14.5	58.1	6.58	334.5	4.98	21.00	148.6
G023S	1/31/2024	11:10	45.32	14.5	58.1	6.54	334.9	4.72	16.42	149.9

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G024S	1/31/2024	9:18	45.04	14.8	58.6	6.96	273.4	5.92	23.85	135.9
G024S	1/31/2024	9:21	45.04	15.0	59.0	6.97	231.1	4.35	21.71	137.2
G024S	1/31/2024	9:24	45.04	14.9	58.8	6.98	216.2	3.41	17.33	137.5
G024S	1/31/2024	9:27	45.04	14.9	58.8	6.98	211.3	2.83	13.81	137.6

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G051D	1/30/2024	10:57	44.36	15.3	59.5	5.52	342.5	3.79	34.73	187.6
G051D	1/30/2024	11:00	44.36	15.4	59.7	5.52	341.2	3.70	74.33	187.8
G051D	1/30/2024	11:03	44.36	15.5	59.9	5.51	341.2	3.66	98.36	188.0
G051D	1/30/2024	11:06	44.36	15.6	60.1	5.50	342.1	3.59	76.60	187.9
G051D	1/30/2024	11:09	44.36	15.5	59.9	5.50	341.9	3.59	67.67	188.0
G051D	1/30/2024	11:12	44.36	15.6	60.1	5.49	341.2	3.54	54.34	188.2

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G052D	1/31/2024	8:56	29.74	12.0	53.6	6.26	371.3	2.14	3.38	-36.4
G052D	1/31/2024	8:59	29.74	11.7	53.1	6.27	369.4	1.89	3.02	-42.7
G052D	1/31/2024	9:02	29.74	11.9	53.4	6.28	368.9	1.72	3.22	-47.8
G052D	1/31/2024	9:05	29.74	11.9	53.4	6.29	368.5	1.64	2.62	-52.0
G052D	1/31/2024	9:08	29.74	11.8	53.2	6.30	368.0	1.51	2.51	-55.6

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G053D	1/30/2024	12:46	38.46	14.8	58.6	6.83	389.7	6.13	22.93	143.4
G053D	1/30/2024	12:49	38.46	14.9	58.8	6.57	395.1	2.68	10.59	148.9
G053D	1/30/2024	12:52	38.46	15.0	59.0	6.49	395.8	1.78	7.12	150.2

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G054D	1/31/2024	10:56	39.58	14.5	58.1	6.47	687.7	0.70	21.41	22.0
G054D	1/31/2024	10:59	39.58	14.7	58.5	6.47	688.7	0.75	15.29	20.9
G054D	1/31/2024	11:02	39.58	14.6	58.3	6.47	689.1	0.72	12.73	20.1
G054D	1/31/2024	11:05	39.58	14.5	58.1	6.47	685.7	0.70	9.78	19.3
G054D	1/31/2024	11:08	39.58	14.7	58.5	6.48	687.8	0.73	7.22	18.3
G054D	1/31/2024	11:11	39.58	14.7	58.5	6.48	687.5	0.73	6.88	17.5

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G101_LF	1/31/2024	14:47	47.10	14.7	58.5	6.49	260.1	6.73	145.74	153.2
G101_LF	1/31/2024	14:50	47.10	14.7	58.5	6.48	259.3	6.70	123.15	153.5
G101_LF	1/31/2024	14:53	47.10	14.8	58.6	6.48	259.2	6.67	95.87	153.5
G101_LF	1/31/2024	14:56	47.10	14.7	58.5	6.47	259.5	6.72	79.36	154.0
G101_LF	1/31/2024	14:59	47.10	14.7	58.5	6.47	258.8	6.73	73.11	154.1
G101_LF	1/31/2024	15:02	47.10	14.6	58.3	6.48	258.9	6.74	65.14	153.9
G101_LF	1/31/2024	15:05	47.10	14.5	58.1	6.47	258.9	6.77	62.41	154.5
G101_LF	1/31/2024	15:08	47.10	14.6	58.3	6.47	259.1	6.79	58.32	154.4
G101_LF	1/31/2024	15:11	47.10	14.6	58.3	6.47	258.8	6.77	55.18	154.5

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G102	1/31/2024	14:17	59.63	15.6	60.1	6.30	245.6	7.85	14.40	156.6
G102	1/31/2024	14:20	59.63	15.4	59.7	6.29	245.2	7.69	13.05	157.2
G102	1/31/2024	14:23	59.63	15.3	59.5	6.27	245.3	7.64	10.17	157.9

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G105	1/31/2024	13:46	56.19	16.1	61.0	6.10	335.9	7.88	14.24	163.3
G105	1/31/2024	13:49	56.19	16.0	60.8	6.07	326.4	7.89	12.18	164.1
G105	1/31/2024	13:52	56.19	16.1	61.0	6.06	322.8	7.89	6.04	164.8
G105	1/31/2024	13:55	56.19	15.9	60.6	6.05	322.1	7.88	8.88	165.3

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G107	2/1/2024	9:00	55.20	14.4	57.9	6.34	661.5	3.12	86.34	165.9
G107	2/1/2024	9:03	55.20	14.6	58.3	6.34	662.0	3.11	61.29	165.6
G107	2/1/2024	9:06	55.20	13.9	57.0	6.35	662.3	3.13	47.29	165.3
G107	2/1/2024	9:09	55.20	13.6	56.5	6.36	660.9	3.14	39.25	165.1
G107	2/1/2024	9:12	55.20	14.4	57.9	6.35	660.1	3.13	37.73	165.0
G107	2/1/2024	9:15	55.20	14.8	58.6	6.35	661.0	3.12	29.04	164.7

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G109	1/31/2024	13:10	52.78	16.6	61.9	6.67	235.6	7.83	9.56	141.5
G109	1/31/2024	13:13	52.78	15.7	60.3	6.54	232.8	6.97	37.10	144.4
G109	1/31/2024	13:16	52.78	16.2	61.2	6.44	225.7	6.29	30.01	146.7
G109	1/31/2024	13:19	52.78	16.3	61.3	6.40	223.5	6.02	20.09	148.1
G109	1/31/2024	13:22	52.78	16.2	61.2	6.38	222.5	5.90	15.27	148.8
G109	1/31/2024	13:25	52.78	16.3	61.3	6.35	221.7	5.83	11.50	149.8

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G111 LF	1/31/2024	12:53	50.41	16.3	61.3	6.94	297.6	6.29	11.67	139.8
G111 LF	1/31/2024	12:56	50.41	16.3	61.3	6.71	296.9	5.20	9.43	139.8
G111 LF	1/31/2024	12:59	50.41	16.3	61.3	6.62	296.4	4.86	7.61	140.0

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XPW01_pore	1/30/2024	12:05	2.16	16.0	60.8	8.38	788.5	0.67	9.78	2.1
XPW01_pore	1/30/2024	12:08	2.16	16.0	60.8	8.42	790.4	0.54	7.47	-10.4
XPW01_pore	1/30/2024	12:11	2.16	15.9	60.6	8.45	791.2	0.49	5.98	-22.3
XPW01_pore	1/30/2024	12:14	2.16	16.1	61.0	8.44	799.6	0.43	4.79	-30.8

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XPW02_pore	1/29/2024	14:42	2.13	15.0	59.0	7.66	4,087.7	0.63	21.41	54.6
XPW02_pore	1/29/2024	14:45	2.13	15.1	59.2	7.69	4,107.2	0.56	18.16	11.6
XPW02_pore	1/29/2024	14:48	2.13	15.2	59.4	7.71	4,114.1	0.51	15.52	-26.0
XPW02_pore	1/29/2024	14:51	2.13	15.3	59.5	7.72	4,118.2	0.48	13.32	-54.7

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XPW03_pore	1/30/2024	12:44	12.97	15.9	60.6	10.88	578.7	2.41	9.70	3.8
XPW03_pore	1/30/2024	12:47	12.97	16.1	61.0	10.87	580.0	2.12	6.65	3.3
XPW03_pore	1/30/2024	12:50	12.97	16.2	61.2	10.86	581.0	2.30	4.24	2.8
XPW03_pore	1/30/2024	12:53	12.97	16.2	61.2	10.86	582.7	2.24	2.91	2.6
XPW03_pore	1/30/2024	12:56	12.97	16.1	61.0	10.86	582.6	2.25	2.54	2.6
XPW03_pore	1/30/2024	12:59	12.97	16.2	61.2	10.85	583.5	1.97	2.34	2.1
XPW03_pore	1/30/2024	13:02	12.97	16.3	61.3	10.85	583.9	1.87	2.37	2.0

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

LIMS Workorder: 24010966

Joppa- 1Q 2024

JOP-257-401

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XSG01	1/29/2024	14:51	N/A	DTW Only						

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

LIMS Workorder: 24010966

Joppa- 1Q 2024

JOP-257-401

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
YSG03	1/29/2024	12:00	40.53	DTW Only						

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

LIMS Workorder: 24010966

Joppa- 1Q 2024

JOP-257-401

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
Field Blank	2/1/2024	11:42	QA/QC Sample							

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G052D Duplicate	1/31/2024	8:56	29.74	12.0	53.6	6.26	371.3	2.14	3.38	-36.4
G052D Duplicate	1/31/2024	8:59	29.74	11.7	53.1	6.27	369.4	1.89	3.02	-42.7
G052D Duplicate	1/31/2024	9:02	29.74	11.9	53.4	6.28	368.9	1.72	3.22	-47.8
G052D Duplicate	1/31/2024	9:05	29.74	11.9	53.4	6.29	368.5	1.64	2.62	-52.0
G052D Duplicate	1/31/2024	9:08	29.74	11.8	53.2	6.30	368.0	1.51	2.51	-55.6

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24010966

Joppa- 1Q 2024

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G012S Duplicate	2/1/2024	11:11	46.90	13.6	56.5	6.66	546.2	6.35	21.14	144.1
G012S Duplicate	2/1/2024	11:14	46.90	13.9	57.0	6.55	546.7	4.78	20.98	146.8
G012S Duplicate	2/1/2024	11:17	46.90	14.0	57.2	6.51	547.1	3.78	21.10	147.5

Site Sampling Event: Joppa 1Q24

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

LIMS Workorder: 24010966

Joppa- 1Q 2024

JOP-257-401

Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
Equipment Blank 1	2/1/2024	12:00	QA/QC Sample							

Site Sampling Event: Joppa 1Q24

LIMS Workorder: 24010966

Technician(s): DC, JC, TC, BG

Field Calibration Log(s)

Joppa- 1Q 2024

Field Temp SOP 1156 - SM 2550 B
 Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
 Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 45720 Technician(s): justin colp Date: 1/30/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230830b	4.00	1/30/24 8:06
7.0 Buffer	wc230616f	7.02	1/30/24 8:02
10.0 Buffer	wc231027d	10.02	1/30/24 8:11
LCS/CCV (7.0 Buffer)	wc231207a		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1415	1/30/24 8:19

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	2.1	1/30/24 8:24
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %	Comments
LCS	1/30/24 8:28	16.4	7.02	1,418	2.3			
CCV (Midday)	1/30/24 12:56	17	7.03	1,427	2.7			
CCV	1/30/24 15:10	17.1	7.03	1,435	2.8			

Field Meter ID: Pine 45720 Technician(s): justin colp Date: 1/31/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230830b	4.01	1/31/24 7:49
7.0 Buffer	wc230616f	7.00	1/31/24 7:46
10.0 Buffer	wc231027d	10.01	1/31/24 7:56
LCS/CCV (7.0 Buffer)	wc231207a		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1413	1/31/24 8:01

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	1.89	1/31/24 8:05
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %	Comments
LCS	1/31/24 8:09	14.6	7.01	1,422	1.98			
CCV (Midday)	1/31/24 12:20	15.3	7.02	1,431	2.01			
CCV	1/31/24 15:16	15.9	7.02	1,446	2.09			

Site Sampling Event: Joppa 1Q24

LIMS Workorder: 24010966

Technician(s): DC, JC, TC, BG

Field Calibration Log(s)

Joppa- 1Q 2024

Field Temp SOP 1156 - SM 2550 B
 Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
 Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 45720 Technician(s): justin colp Date: 2/1/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230830b	4.01	2/1/24 7:55
7.0 Buffer	wc230616f	7.01	2/1/24 7:52
10.0 Buffer	wc231027d	9.99	2/1/24 7:59
LCS/CCV (7.0 Buffer)	wc231207a		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 μ S Std.	95009	1414	2/1/24 8:03

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	1.99	2/1/24 8:07
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Date/Time	Temp. °C	pH S.U.	Conductivity μ S	Turbidity NTU	ORP mV	D.O. %	Comments
LCS	2/1/24 8:12	13.8	7.02	1,421	2			
CCV (Midday)								
CCV	2/1/24 12:40	16.6	7.03	1,448	2.03			

Field Meter ID: _____ Technician(s): _____ Date: _____

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer			
7.0 Buffer			
10.0 Buffer			
LCS/CCV (7.0 Buffer)			

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 μ S Std.			

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Date/Time	Temp. °C	pH S.U.	Conductivity μ S	Turbidity NTU	ORP mV	D.O. %	Comments
LCS								
CCV (Midday)								
CCV								

Site Sampling Event: Joppa 1Q24

LIMS Workorder: 24010966

Technician(s): DC, JC, TC, BG

Field Calibration Log(s)

Joppa- 1Q 2024

Field Temp SOP 1156 - SM 2550 B
 Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
 Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 45600 Technician(s): Tracy Carroll/Danny Crump Date: 1/29/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	1/29/24 12:23
7.0 Buffer	WC230616F	7.00	1/29/24 12:25
10.0 Buffer	WC231027D	10.00	1/29/24 12:31
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1412	1/29/24 12:35

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.23	1/29/24 12:39
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %	Comments
LCS	1/29/24 12:40	17.4	7.08	1,414	0.21			
CCV (Midday)								
CCV	1/29/24 15:42	16.5	7.09	1,419	0.41			

Field Meter ID: Pine 45600 Technician(s): Tracy Carroll/Danny Crump Date: 1/30/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	1/30/24 8:16
7.0 Buffer	WC230616F	7.00	1/30/24 8:20
10.0 Buffer	WC231027D	10.00	1/30/24 8:26
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1412	1/30/24 8:30

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %	Comments
LCS	1/30/24 8:37	6.1	7.10	1,410	0.3			
CCV (Midday)	1/30/24 11:36	10.5	7.08	1,411	0.1			
CCV	1/30/24 14:59	14	7.09	1,344	0.1			

Site Sampling Event: Joppa 1Q24

LIMS Workorder: 24010966

Technician(s): DC, JC, TC, BG

Field Calibration Log(s)

Joppa- 1Q 2024

Field Temp SOP 1156 - SM 2550 B
 Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
 Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 45600 Technician(s): Tracy Carroll/Danny Crump Date: 1/31/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	1/31/24 7:53
7.0 Buffer	WC230616F	7.00	1/31/24 7:55
10.0 Buffer	WC231027D	10.00	1/31/24 8:07
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 μ S Std.	95009	1412	1/31/24 8:11

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0	1/31/24 8:22
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Date/Time	Temp. °C	pH S.U.	Conductivity μ S	Turbidity NTU	ORP mV	D.O. %	Comments
LCS	1/31/24 8:22	6.3	7.09	1,412	0.03			
CCV (Midday)	1/31/24 12:03	12.6	7.09	1,398	0.2			
CCV	1/31/24 15:46	16.8	7.09	1,326	0.1			

Field Meter ID: _____ Technician(s): _____ Date: _____

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer			
7.0 Buffer			
10.0 Buffer			
LCS/CCV (7.0 Buffer)			

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 μ S Std.			

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Date/Time	Temp. °C	pH S.U.	Conductivity μ S	Turbidity NTU	ORP mV	D.O. %	Comments
LCS								
CCV (Midday)								
CCV								

May 15, 2024

Eric Bauer
Ramboll
234 W. Florida Street
Fifth Floor
Milwaukee, WI 53204
TEL: (414) 837-3607
FAX: (414) 837-3608



Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: JOP-24Q2

WorkOrder: 24041007

Dear Eric Bauer:

TEKLAB, INC received 18 samples for JOP_257_401 on 4/23/2024 6:33:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Elizabeth A. Hurley
Director of Customer Service
(618)344-1004 ex 33
ehurley@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

This reporting package includes the following:

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Accreditations	6
Laboratory Results	7
Sample Summary	25
Quality Control Results	26
Receiving Check List	45
Chain of Custody	Appended

Definitions

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

Abbr Definition

* Analytes on report marked with an asterisk are not NELAP accredited

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.

DNI Did not ignite

DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

TNTC Too numerous to count (> 200 CFU)



Definitions

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

Qualifiers

# - Unknown hydrocarbon	B - Analyte detected in associated Method Blank
C - RL shown is a Client Requested Quantitation Limit	E - Value above quantitation range
H - Holding times exceeded	I - Associated internal standard was outside method criteria
J - Analyte detected below quantitation limits	M - Manual Integration used to determine area response
ND - Not Detected at the Reporting Limit	R - RPD outside accepted recovery limits
S - Spike Recovery outside recovery limits	T - TIC(Tentatively identified compound)
X - Value exceeds Maximum Contaminant Level	



Case Narrative

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

Cooler Receipt Temp: 5.7 °C

An employee of Teklab, Inc. collected the sample(s).

XSG01 and YSG03 date/times of collection per SAR3/SAR4 depth files. Equipment Blanks were not required. EAH 4/24/24

G005 collection time per field file. EAH 4/30/24

G001D, G002D, G003, G051D, and Field Blank collection times per field file. EAH 5/10/24

Per Eric Bauer's request, only JOP_257_401 data is included in this report. EAH 5/15/24

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com



Accreditations

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Illinois	IEPA	1004652024-2	NELAP	4/30/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2025	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2025	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Mississippi	MSDH			4/30/2025	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041007-001
Matrix: GROUNDWATER

Work Order: 24041007
Report Date: 15-May-24

Client Sample ID: G001D

Collection Date: 04/22/2024 12:01

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		41.86	ft	1	04/22/2024 12:01	R346336
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		220	NTU	1	04/22/2024 12:01	R346336
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		131	mV	1	04/22/2024 12:01	R346336
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		568	µS/cm	1	04/22/2024 12:01	R346336
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		17.3	°C	1	04/22/2024 12:01	R346336
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.75	mg/L	1	04/22/2024 12:01	R346336
SW-846 9040B FIELD									
pH	*	0	1.00		6.32		1	04/22/2024 12:01	R346336
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		310	mg/L	1	04/24/2024 8:31	R346304
SW-846 9036 (TOTAL)									
Sulfate	NELAP	12	20		42	mg/L	2	04/25/2024 20:30	R346337
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.20	mg/L	1	04/30/2024 10:26	R346519
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		16	mg/L	1	04/25/2024 20:20	R346372
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0723	0.100		40.4	mg/L	1	04/24/2024 16:03	221874
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 14:08	221874
Arsenic	NELAP	0.0004	0.0010	J	0.0008	mg/L	5	04/24/2024 14:08	221874
Barium	NELAP	0.0007	0.0010		0.218	mg/L	5	04/24/2024 14:08	221874
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 14:08	221874
Boron	NELAP	0.0092	0.0250		< 0.0250	mg/L	5	04/24/2024 14:08	221874
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 14:08	221874
Chromium	NELAP	0.0008	0.0015		0.0046	mg/L	5	04/24/2024 14:08	221874
Cobalt	NELAP	0.0001	0.0010		0.0015	mg/L	5	04/25/2024 13:35	221874
Lead	NELAP	0.0006	0.0010		0.0011	mg/L	5	04/24/2024 14:08	221874
Lithium	*	0.0015	0.0030	J	0.0017	mg/L	5	04/25/2024 13:35	221874
Molybdenum	NELAP	0.0006	0.0015	J	0.0007	mg/L	5	04/25/2024 13:35	221874
Selenium	NELAP	0.0006	0.0010		0.0013	mg/L	5	04/24/2024 14:08	221874
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	04/24/2024 14:08	221874
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00012	0.00020		0.00035	mg/L	1	05/01/2024 13:36	222008



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041007-002
Matrix: GROUNDWATER

Work Order: 24041007
Report Date: 15-May-24

Client Sample ID: G002D

Collection Date: 04/22/2024 12:59

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		42.32	ft	1	04/22/2024 12:59	R346336
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		< 1.0	NTU	1	04/22/2024 12:59	R346336
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		162	mV	1	04/22/2024 12:59	R346336
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		406	µS/cm	1	04/22/2024 12:59	R346336
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		14.8	°C	1	04/22/2024 12:59	R346336
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		2.91	mg/L	1	04/22/2024 12:59	R346336
SW-846 9040B FIELD									
pH	*	0	1.00		6.25		1	04/22/2024 12:59	R346336
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		218	mg/L	1	04/24/2024 8:52	R346304
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		13	mg/L	1	04/25/2024 20:41	R346337
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.22	mg/L	1	04/30/2024 10:28	R346519
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		19	mg/L	1	04/25/2024 20:41	R346372
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0723	0.100		38.9	mg/L	1	04/24/2024 16:05	221874
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 14:14	221874
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	04/24/2024 14:14	221874
Barium	NELAP	0.0007	0.0010		0.180	mg/L	5	04/24/2024 14:14	221874
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 14:14	221874
Boron	NELAP	0.0092	0.0250		< 0.0250	mg/L	5	04/24/2024 14:14	221874
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 14:14	221874
Chromium	NELAP	0.0008	0.0015	J	0.0012	mg/L	5	04/24/2024 14:14	221874
Cobalt	NELAP	0.0001	0.0010	J	0.0002	mg/L	5	04/24/2024 14:14	221874
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 14:14	221874
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	04/25/2024 13:41	221874
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	04/25/2024 13:41	221874
Selenium	NELAP	0.0006	0.0010		0.0014	mg/L	5	04/24/2024 14:14	221874
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	04/24/2024 14:14	221874
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00012	0.00020		0.00027	mg/L	1	05/01/2024 13:38	222008



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041007-003
Matrix: GROUNDWATER

Work Order: 24041007
Report Date: 15-May-24

Client Sample ID: G003

Collection Date: 04/22/2024 14:26

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		37.45	ft	1	04/22/2024 14:26	R346336
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		86	NTU	1	04/22/2024 14:26	R346336
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		170	mV	1	04/22/2024 14:26	R346336
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		505	µS/cm	1	04/22/2024 14:26	R346336
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		19.9	°C	1	04/22/2024 14:26	R346336
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		3.46	mg/L	1	04/22/2024 14:26	R346336
SW-846 9040B FIELD									
pH	*	0	1.00		6.24		1	04/22/2024 14:26	R346336
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		245	mg/L	2.5	04/24/2024 8:52	R346304
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50		73	mg/L	5	04/25/2024 21:02	R346337
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.21	mg/L	1	04/30/2024 10:30	R346519
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		20	mg/L	1	04/25/2024 20:44	R346372
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0723	0.100		45.2	mg/L	1	04/24/2024 16:16	221874
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 17:00	221874
Arsenic	NELAP	0.0004	0.0010		0.0016	mg/L	5	04/24/2024 17:00	221874
Barium	NELAP	0.0007	0.0010		0.0647	mg/L	5	04/24/2024 17:00	221874
Beryllium	NELAP	0.0002	0.0010	J	0.0003	mg/L	5	04/24/2024 17:00	221874
Boron	NELAP	0.0092	0.0250		0.280	mg/L	5	04/30/2024 17:18	221874
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 17:00	221874
Chromium	NELAP	0.0008	0.0015		0.0085	mg/L	5	04/24/2024 17:00	221874
Cobalt	NELAP	0.0001	0.0010		0.0023	mg/L	5	04/24/2024 17:00	221874
Lead	NELAP	0.0006	0.0010		0.0017	mg/L	5	04/24/2024 17:00	221874
Lithium	*	0.0015	0.0030	J	0.0023	mg/L	5	04/25/2024 16:33	221874
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	05/02/2024 11:12	221874
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 17:00	221874
Thallium	NELAP	0.0010	0.0020	J	0.0016	mg/L	5	04/24/2024 17:00	221874
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00012	0.00020		0.00044	mg/L	1	05/01/2024 13:41	222008



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q2

Work Order: 24041007
Report Date: 15-May-24

Lab ID: 24041007-004

Client Sample ID: G005

Matrix: GROUNDWATER

Collection Date: 04/23/2024 11:18

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		43.20	ft	1	04/23/2024 11:18	R346336
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		39	NTU	1	04/23/2024 11:18	R346336
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		26	mV	1	04/23/2024 11:18	R346336
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		526	µS/cm	1	04/23/2024 11:18	R346336
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		16.9	°C	1	04/23/2024 11:18	R346336
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.70	mg/L	1	04/23/2024 11:18	R346336
SW-846 9040B FIELD									
pH	*	0	1.00		6.38		1	04/23/2024 11:18	R346336
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		336	mg/L	1	04/24/2024 8:53	R346304
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50		90	mg/L	5	04/25/2024 21:10	R346337
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.38	mg/L	1	04/30/2024 10:32	R346519
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		18	mg/L	1	04/25/2024 21:05	R346372
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0723	0.100		53.8	mg/L	1	04/24/2024 16:06	221874
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0006	0.0010	J	0.0008	mg/L	5	04/24/2024 15:00	221874
Arsenic	NELAP	0.0004	0.0010	J	0.0009	mg/L	5	04/24/2024 15:00	221874
Barium	NELAP	0.0007	0.0010		0.208	mg/L	5	04/24/2024 15:00	221874
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 15:00	221874
Boron	NELAP	0.0092	0.0250		0.0503	mg/L	5	04/24/2024 15:00	221874
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 15:00	221874
Chromium	NELAP	0.0007	0.0015		0.0029	mg/L	5	04/25/2024 13:46	221874
Cobalt	NELAP	0.0001	0.0010		0.0025	mg/L	5	04/24/2024 15:00	221874
Lead	NELAP	0.0006	0.0010	J	0.0007	mg/L	5	04/24/2024 15:00	221874
Lithium	*	0.0015	0.0030	J	0.0029	mg/L	5	04/25/2024 13:46	221874
Molybdenum	NELAP	0.0006	0.0015		0.0040	mg/L	5	04/25/2024 13:46	221874
Selenium	NELAP	0.0006	0.0010		0.0017	mg/L	5	04/24/2024 15:00	221874
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	04/24/2024 15:00	221874
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00012	0.00020		0.00032	mg/L	1	05/01/2024 13:43	222008



Client: Ramboll
Client Project: JOP-24Q2

Work Order: 24041007
Report Date: 15-May-24

Lab ID: 24041007-005

Client Sample ID: G006

Matrix: GROUNDWATER

Collection Date: 04/23/2024 15:17

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		37.32	ft	1	04/23/2024 15:17	R346336
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		77	NTU	1	04/23/2024 15:17	R346336
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		84	mV	1	04/23/2024 15:17	R346336
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		693	µS/cm	1	04/23/2024 15:17	R346336
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		16.1	°C	1	04/23/2024 15:17	R346336
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.32	mg/L	1	04/23/2024 15:17	R346336
SW-846 9040B FIELD									
pH	*	0	1.00		6.59		1	04/23/2024 15:17	R346336
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		486	mg/L	1	04/24/2024 10:29	R346304
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		185	mg/L	10	04/25/2024 21:18	R346337
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.26	mg/L	1	04/30/2024 10:33	R346519
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		19	mg/L	1	04/25/2024 21:13	R346372
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100	S	86.0	mg/L	1	04/25/2024 17:25	221253
<i>Matrix spike control limits are not applicable due to high sample/spike ratio.</i>									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/25/2024 17:36	221253
Arsenic	NELAP	0.0004	0.0010		0.0020	mg/L	5	04/25/2024 17:36	221253
Barium	NELAP	0.0007	0.0010		0.0453	mg/L	5	04/25/2024 17:36	221253
Beryllium	NELAP	0.0002	0.0010	J	0.0003	mg/L	5	04/25/2024 17:36	221253
Boron	NELAP	0.0092	0.0250	S	3.17	mg/L	5	04/30/2024 18:41	221253
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/25/2024 17:36	221253
Chromium	NELAP	0.0007	0.0015		0.0084	mg/L	5	04/25/2024 17:36	221253
Cobalt	NELAP	0.0001	0.0010		0.0021	mg/L	5	04/25/2024 17:36	221253
Lead	NELAP	0.0006	0.0010		0.0024	mg/L	5	04/25/2024 17:36	221253
Lithium	*	0.0015	0.0030		0.0062	mg/L	5	04/25/2024 17:36	221253
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	05/06/2024 9:49	221253
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/25/2024 17:36	221253
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	04/30/2024 18:41	221253
<i>Matrix spike control limits are not applicable due to high sample/spike ratio.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00012	0.00020		0.00031	mg/L	1	05/01/2024 13:45	222008



Client: Ramboll
Client Project: JOP-24Q2

Work Order: 24041007
Report Date: 15-May-24

Lab ID: 24041007-006

Client Sample ID: G007

Matrix: GROUNDWATER

Collection Date: 04/23/2024 11:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		37.17	ft	1	04/23/2024 11:30	R346336
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		88	NTU	1	04/23/2024 11:30	R346336
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		138	mV	1	04/23/2024 11:30	R346336
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		895	µS/cm	1	04/23/2024 11:30	R346336
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		17.3	°C	1	04/23/2024 11:30	R346336
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.07	mg/L	1	04/23/2024 11:30	R346336
SW-846 9040B FIELD									
pH	*	0	1.00		6.39		1	04/23/2024 11:30	R346336
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		575	mg/L	2.5	04/24/2024 8:53	R346304
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		262	mg/L	10	04/25/2024 21:26	R346337
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.42	mg/L	1	04/30/2024 10:35	R346519
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		20	mg/L	1	04/25/2024 21:21	R346372
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0723	0.100		94.5	mg/L	1	04/24/2024 16:20	221874
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 15:06	221874
Arsenic	NELAP	0.0004	0.0010		0.0069	mg/L	5	04/24/2024 15:06	221874
Barium	NELAP	0.0007	0.0010		0.265	mg/L	5	04/24/2024 15:06	221874
Beryllium	NELAP	0.0002	0.0010		0.0015	mg/L	5	04/24/2024 15:06	221874
Boron	NELAP	0.0092	0.0250		4.12	mg/L	5	04/24/2024 15:06	221874
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 15:06	221874
Chromium	NELAP	0.0008	0.0015		0.0514	mg/L	5	04/24/2024 15:06	221874
Cobalt	NELAP	0.0001	0.0010		0.0066	mg/L	5	04/24/2024 15:06	221874
Lead	NELAP	0.0006	0.0010		0.0106	mg/L	5	04/24/2024 15:06	221874
Lithium	*	0.0015	0.0030		0.0102	mg/L	5	04/25/2024 13:52	221874
Molybdenum	NELAP	0.0006	0.0015		0.0021	mg/L	5	04/25/2024 13:52	221874
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 15:06	221874
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	04/24/2024 15:06	221874
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00012	0.00020		0.00021	mg/L	1	05/01/2024 13:48	222008



Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

Lab ID: 24041007-007

Client Sample ID: G008

Matrix: GROUNDWATER

Collection Date: 04/23/2024 9:51

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		27.05	ft	1	04/23/2024 9:51	R346336
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		27	NTU	1	04/23/2024 9:51	R346336
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		-8	mV	1	04/23/2024 9:51	R346336
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		886	µS/cm	1	04/23/2024 9:51	R346336
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		17.4	°C	1	04/23/2024 9:51	R346336
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.34	mg/L	1	04/23/2024 9:51	R346336
SW-846 9040B FIELD									
pH	*	0	1.00		6.89		1	04/23/2024 9:51	R346336
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		592	mg/L	1	04/24/2024 8:53	R346304
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		266	mg/L	10	04/25/2024 21:34	R346337
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.28	mg/L	1	04/30/2024 10:37	R346519
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		12	mg/L	1	04/25/2024 21:29	R346372
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0723	0.100		121	mg/L	1	04/24/2024 16:22	221874
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 15:11	221874
Arsenic	NELAP	0.0004	0.0010		0.0044	mg/L	5	04/24/2024 15:11	221874
Barium	NELAP	0.0007	0.0010		0.0524	mg/L	5	04/24/2024 15:11	221874
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 15:11	221874
Boron	NELAP	0.0092	0.0250		4.45	mg/L	5	04/24/2024 15:11	221874
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 15:11	221874
Chromium	NELAP	0.0008	0.0015		0.0036	mg/L	5	04/24/2024 15:11	221874
Cobalt	NELAP	0.0001	0.0010		0.0037	mg/L	5	04/24/2024 15:11	221874
Lead	NELAP	0.0006	0.0010	J	0.0007	mg/L	5	04/24/2024 15:11	221874
Lithium	*	0.0015	0.0030		0.0031	mg/L	5	04/25/2024 13:58	221874
Molybdenum	NELAP	0.0006	0.0015	J	0.0014	mg/L	5	04/25/2024 13:58	221874
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 15:11	221874
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	04/24/2024 15:11	221874
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00012	0.00020		0.00021	mg/L	1	05/01/2024 13:50	222008



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041007-008
Matrix: GROUNDWATER

Work Order: 24041007
Report Date: 15-May-24

Client Sample ID: G009

Collection Date: 04/23/2024 8:42

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		35.69	ft	1	04/23/2024 8:42	R346336
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		74	NTU	1	04/23/2024 8:42	R346336
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		-4	mV	1	04/23/2024 8:42	R346336
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		747	µS/cm	1	04/23/2024 8:42	R346336
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		17.0	°C	1	04/23/2024 8:42	R346336
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.16	mg/L	1	04/23/2024 8:42	R346336
SW-846 9040B FIELD									
pH	*	0	1.00		6.11		1	04/23/2024 8:42	R346336
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		530	mg/L	2.5	04/24/2024 9:15	R346304
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		234	mg/L	10	04/25/2024 21:55	R346337
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.27	mg/L	1	04/30/2024 10:57	R346519
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		15	mg/L	1	04/25/2024 21:37	R346372
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0723	0.100		64.6	mg/L	1	04/24/2024 16:24	221874
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0006	0.0010	J	0.0008	mg/L	5	04/24/2024 15:17	221874
Arsenic	NELAP	0.0004	0.0010		0.0061	mg/L	5	04/24/2024 15:17	221874
Barium	NELAP	0.0007	0.0010		0.0642	mg/L	5	04/24/2024 15:17	221874
Beryllium	NELAP	0.0002	0.0010		0.0013	mg/L	5	04/24/2024 15:17	221874
Boron	NELAP	0.0092	0.0250		3.52	mg/L	5	04/24/2024 15:17	221874
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 15:17	221874
Chromium	NELAP	0.0008	0.0015		0.0179	mg/L	5	04/24/2024 15:17	221874
Cobalt	NELAP	0.0001	0.0010		0.0051	mg/L	5	04/24/2024 15:17	221874
Lead	NELAP	0.0006	0.0010		0.0039	mg/L	5	04/24/2024 15:17	221874
Lithium	*	0.0015	0.0030		0.0046	mg/L	5	04/25/2024 14:44	221874
Molybdenum	NELAP	0.0006	0.0015	J	0.0009	mg/L	5	04/25/2024 14:44	221874
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 15:17	221874
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	04/24/2024 15:17	221874
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00012	0.00020		0.00023	mg/L	1	05/01/2024 13:57	222008



Client: Ramboll
Client Project: JOP-24Q2

Work Order: 24041007
Report Date: 15-May-24

Lab ID: 24041007-009

Client Sample ID: G010

Matrix: GROUNDWATER

Collection Date: 04/22/2024 15:16

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		35.49	ft	1	04/22/2024 15:16	R346336
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		70	NTU	1	04/22/2024 15:16	R346336
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		35	mV	1	04/22/2024 15:16	R346336
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		1210	µS/cm	1	04/22/2024 15:16	R346336
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		17.1	°C	1	04/22/2024 15:16	R346336
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.31	mg/L	1	04/22/2024 15:16	R346336
SW-846 9040B FIELD									
pH	*	0	1.00		6.60		1	04/22/2024 15:16	R346336
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		800	mg/L	2.5	04/24/2024 9:16	R346304
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		339	mg/L	10	04/25/2024 22:03	R346337
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.49	mg/L	1	04/30/2024 11:00	R346519
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		19	mg/L	1	04/25/2024 21:58	R346372
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0723	0.100		124	mg/L	1	04/24/2024 16:25	221874
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 15:23	221874
Arsenic	NELAP	0.0004	0.0010		0.0120	mg/L	5	04/24/2024 15:23	221874
Barium	NELAP	0.0007	0.0010		0.0515	mg/L	5	04/24/2024 15:23	221874
Beryllium	NELAP	0.0002	0.0010	J	0.0005	mg/L	5	04/24/2024 15:23	221874
Boron	NELAP	0.0092	0.0250		2.31	mg/L	5	04/24/2024 15:23	221874
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 15:23	221874
Chromium	NELAP	0.0008	0.0015		0.0070	mg/L	5	04/24/2024 15:23	221874
Cobalt	NELAP	0.0001	0.0010		0.0035	mg/L	5	04/24/2024 15:23	221874
Lead	NELAP	0.0006	0.0010		0.0013	mg/L	5	04/24/2024 15:23	221874
Lithium	*	0.0015	0.0030		0.0095	mg/L	5	04/25/2024 14:50	221874
Molybdenum	NELAP	0.0006	0.0015		0.0022	mg/L	5	04/25/2024 14:50	221874
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 15:23	221874
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	04/24/2024 15:23	221874
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00012	0.00020		0.00028	mg/L	1	05/01/2024 13:59	222008



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041007-010
Matrix: GROUNDWATER

Work Order: 24041007
Report Date: 15-May-24
Client Sample ID: G011
Collection Date: 04/22/2024 12:36

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		45.41	ft	1	04/22/2024 12:36	R346336
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		20	NTU	1	04/22/2024 12:36	R346336
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		112	mV	1	04/22/2024 12:36	R346336
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		632	µS/cm	1	04/22/2024 12:36	R346336
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		17.1	°C	1	04/22/2024 12:36	R346336
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.65	mg/L	1	04/22/2024 12:36	R346336
SW-846 9040B FIELD									
pH	*	0	1.00		6.16		1	04/22/2024 12:36	R346336
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		358	mg/L	1	04/24/2024 9:16	R346304
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		158	mg/L	10	04/25/2024 22:12	R346337
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.20	mg/L	1	04/30/2024 11:01	R346519
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		20	mg/L	1	04/25/2024 22:07	R346372
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0723	0.100		59.1	mg/L	1	04/24/2024 16:27	221874
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 15:28	221874
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	04/24/2024 15:28	221874
Barium	NELAP	0.0007	0.0010		0.0234	mg/L	5	04/24/2024 15:28	221874
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 15:28	221874
Boron	NELAP	0.0092	0.0250		0.309	mg/L	5	04/24/2024 15:28	221874
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 15:28	221874
Chromium	NELAP	0.0008	0.0015	J	0.0010	mg/L	5	04/24/2024 15:28	221874
Cobalt	NELAP	0.0001	0.0010	J	0.0009	mg/L	5	04/24/2024 15:28	221874
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 15:28	221874
Lithium	*	0.0015	0.0030		0.0039	mg/L	5	04/25/2024 14:55	221874
Molybdenum	NELAP	0.0006	0.0015	J	0.0009	mg/L	5	04/25/2024 14:55	221874
Selenium	NELAP	0.0006	0.0010		0.0013	mg/L	5	04/24/2024 15:28	221874
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	04/24/2024 15:28	221874
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00012	0.00020	J	0.00017	mg/L	1	05/01/2024 14:01	222008



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041007-011
Matrix: GROUNDWATER

Work Order: 24041007
Report Date: 15-May-24

Client Sample ID: G051D

Collection Date: 04/22/2024 15:02

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		42.42	ft	1	04/22/2024 15:02	R346336
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		39	NTU	1	04/22/2024 15:02	R346336
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		224	mV	1	04/22/2024 15:02	R346336
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		403	µS/cm	1	04/22/2024 15:02	R346336
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		17.1	°C	1	04/22/2024 15:02	R346336
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		3.37	mg/L	1	04/22/2024 15:02	R346336
SW-846 9040B FIELD									
pH	*	0	1.00		5.40		1	04/22/2024 15:02	R346336
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		288	mg/L	1	04/24/2024 9:16	R346304
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		116	mg/L	10	04/25/2024 22:20	R346337
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10	J	0.08	mg/L	1	04/30/2024 11:04	R346519
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4	J	4	mg/L	1	04/25/2024 22:15	R346372
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0723	0.100		28.8	mg/L	1	04/24/2024 16:28	221874
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 15:34	221874
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	04/24/2024 15:34	221874
Barium	NELAP	0.0007	0.0010		0.0344	mg/L	5	04/24/2024 15:34	221874
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 15:34	221874
Boron	NELAP	0.0092	0.0250		0.784	mg/L	5	04/24/2024 15:34	221874
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 15:34	221874
Chromium	NELAP	0.0007	0.0015		0.0018	mg/L	5	04/25/2024 15:01	221874
Cobalt	NELAP	0.0001	0.0010	J	0.0008	mg/L	5	04/24/2024 15:34	221874
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 15:34	221874
Lithium	*	0.0015	0.0030		0.0065	mg/L	5	04/25/2024 15:01	221874
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	04/25/2024 15:01	221874
Selenium	NELAP	0.0006	0.0010		0.0054	mg/L	5	04/24/2024 15:34	221874
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	04/24/2024 15:34	221874
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00012	0.00020		< 0.00020	mg/L	1	05/01/2024 14:04	222008



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041007-012
Matrix: GROUNDWATER

Work Order: 24041007
Report Date: 15-May-24

Client Sample ID: G052D

Collection Date: 04/23/2024 9:19

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		27.20	ft	1	04/23/2024 9:19	R346336
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		2.7	NTU	1	04/23/2024 9:19	R346336
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		-110	mV	1	04/23/2024 9:19	R346336
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		400	µS/cm	1	04/23/2024 9:19	R346336
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		15.2	°C	1	04/23/2024 9:19	R346336
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.50	mg/L	1	04/23/2024 9:19	R346336
SW-846 9040B FIELD									
pH	*	0	1.00		6.37		1	04/23/2024 9:19	R346336
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		280	mg/L	1	04/24/2024 9:17	R346304
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		40	mg/L	1	04/25/2024 22:22	R346337
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.27	mg/L	1	04/30/2024 11:07	R346519
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		11	mg/L	1	04/25/2024 22:22	R346372
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0723	0.100	S	45.5	mg/L	1	04/24/2024 16:38	221874
<i>Matrix spike control limits are not applicable due to high sample/spike ratio.</i>									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 16:37	221874
Arsenic	NELAP	0.0004	0.0010		0.0012	mg/L	5	04/24/2024 16:37	221874
Barium	NELAP	0.0007	0.0010		0.259	mg/L	5	04/24/2024 16:37	221874
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 16:37	221874
Boron	NELAP	0.0092	0.025	J	0.018	mg/L	5	04/25/2024 15:12	221874
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 16:37	221874
Chromium	NELAP	0.0008	0.0015	J	0.0011	mg/L	5	04/24/2024 16:37	221874
Cobalt	NELAP	0.0001	0.0010		0.0035	mg/L	5	04/24/2024 16:37	221874
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 16:37	221874
Lithium	*	0.0015	0.0030	J	0.0026	mg/L	5	04/25/2024 15:12	221874
Molybdenum	NELAP	0.0006	0.0015	J	0.0007	mg/L	5	04/25/2024 15:12	221874
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 16:37	221874
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	04/24/2024 16:37	221874
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00012	0.00020	J	0.00020	mg/L	1	05/01/2024 14:06	222008



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041007-013
Matrix: GROUNDWATER

Work Order: 24041007
Report Date: 15-May-24

Client Sample ID: G053D

Collection Date: 04/23/2024 10:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		36.03	ft	1	04/23/2024 10:30	R346336
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		37	NTU	1	04/23/2024 10:30	R346336
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		26	mV	1	04/23/2024 10:30	R346336
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		470	µS/cm	1	04/23/2024 10:30	R346336
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		16.5	°C	1	04/23/2024 10:30	R346336
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.16	mg/L	1	04/23/2024 10:30	R346336
SW-846 9040B FIELD									
pH	*	0	1.00		6.39		1	04/23/2024 10:30	R346336
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		316	mg/L	1	04/24/2024 10:02	R346304
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50		72	mg/L	5	04/25/2024 22:49	R346337
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.69	mg/L	1	04/30/2024 11:09	R346519
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		16	mg/L	1	04/25/2024 22:30	R346372
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0723	0.100		38.5	mg/L	1	04/24/2024 16:43	221874
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0006	0.0010	J	0.0008	mg/L	5	04/24/2024 16:20	221874
Arsenic	NELAP	0.0004	0.0010	J	0.0004	mg/L	5	04/24/2024 16:20	221874
Barium	NELAP	0.0007	0.0010		0.103	mg/L	5	04/24/2024 16:20	221874
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 16:20	221874
Boron	NELAP	0.0092	0.0250		0.377	mg/L	5	04/25/2024 15:07	221874
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 16:20	221874
Chromium	NELAP	0.0007	0.0015		0.0029	mg/L	5	04/25/2024 15:07	221874
Cobalt	NELAP	0.0001	0.0010		0.0019	mg/L	5	04/25/2024 15:07	221874
Lead	NELAP	0.0006	0.0010	J	0.0009	mg/L	5	04/24/2024 16:20	221874
Lithium	*	0.0015	0.0030	J	0.0022	mg/L	5	04/25/2024 15:07	221874
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	04/25/2024 15:07	221874
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 16:20	221874
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	04/24/2024 16:20	221874
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00012	0.00020		0.00021	mg/L	1	05/01/2024 14:08	222008



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041007-014
Matrix: GROUNDWATER

Work Order: 24041007
Report Date: 15-May-24

Client Sample ID: G054D

Collection Date: 04/22/2024 14:04

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		37.91	ft	1	04/22/2024 14:04	R346336
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		10	NTU	1	04/22/2024 14:04	R346336
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		-5	mV	1	04/22/2024 14:04	R346336
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		835	µS/cm	1	04/22/2024 14:04	R346336
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		16.6	°C	1	04/22/2024 14:04	R346336
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.13	mg/L	1	04/22/2024 14:04	R346336
SW-846 9040B FIELD									
pH	*	0	1.00		6.61		1	04/22/2024 14:04	R346336
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		492	mg/L	1	04/24/2024 10:02	R346304
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		199	mg/L	10	04/25/2024 22:57	R346337
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.29	mg/L	1	04/30/2024 11:10	R346519
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		20	mg/L	1	04/25/2024 22:52	R346372
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0723	0.100		95.9	mg/L	1	04/24/2024 16:44	221874
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 16:26	221874
Arsenic	NELAP	0.0004	0.0010	J	0.0005	mg/L	5	04/24/2024 16:26	221874
Barium	NELAP	0.0007	0.0010		0.0620	mg/L	5	04/24/2024 16:26	221874
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 16:26	221874
Boron	NELAP	0.0092	0.0250		0.993	mg/L	5	04/30/2024 18:19	221874
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 16:26	221874
Chromium	NELAP	0.0008	0.0015	J	0.0008	mg/L	5	04/24/2024 16:26	221874
Cobalt	NELAP	0.0001	0.0010		0.0087	mg/L	5	04/24/2024 16:26	221874
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 16:26	221874
Lithium	*	0.0015	0.0030	J	0.0030	mg/L	5	04/25/2024 16:22	221874
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	05/02/2024 10:05	221874
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 16:26	221874
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	04/24/2024 16:26	221874
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00012	0.00020		0.00022	mg/L	1	05/01/2024 14:11	222008



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041007-018
Matrix: GROUNDWATER

Work Order: 24041007
Report Date: 15-May-24
Client Sample ID: XSG01
Collection Date: 04/22/2024 11:09

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		See comment	ft	1	04/22/2024 11:09	R346336
DTW Below Measuring Stick.									



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041007-019
Matrix: GROUNDWATER

Work Order: 24041007
Report Date: 15-May-24
Client Sample ID: YSG03
Collection Date: 04/22/2024 13:17

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		38.25	ft	1	04/22/2024 13:17	R346336



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041007-020
Matrix: AQUEOUS

Work Order: 24041007
Report Date: 15-May-24

Client Sample ID: Field Blank

Collection Date: 04/23/2024 12:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		< 20	mg/L	1	04/24/2024 10:45	R346304
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		< 10	mg/L	1	04/25/2024 23:24	R346337
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		< 0.10	mg/L	1	04/30/2024 11:27	R346519
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		< 4	mg/L	1	04/25/2024 23:24	R346372
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		< 0.100	mg/L	1	04/25/2024 17:42	221253
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/25/2024 17:30	221253
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	04/25/2024 17:30	221253
Barium	NELAP	0.0007	0.0010		< 0.0010	mg/L	5	04/25/2024 17:30	221253
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/25/2024 17:30	221253
Boron	NELAP	0.0092	0.025	J	0.019	mg/L	5	04/30/2024 19:42	221253
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/25/2024 17:30	221253
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	04/25/2024 17:30	221253
Cobalt	NELAP	0.0001	0.0010		< 0.0010	mg/L	5	04/25/2024 17:30	221253
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/25/2024 17:30	221253
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	04/25/2024 17:30	221253
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	05/02/2024 10:01	221253
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/25/2024 17:30	221253
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	04/30/2024 19:42	221253
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00012	0.00020		< 0.00020	mg/L	1	05/01/2024 14:24	222008



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041007-021
Matrix: GROUNDWATER

Work Order: 24041007
Report Date: 15-May-24

Client Sample ID: G052D Duplicate
Collection Date: 04/23/2024 9:19

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		27.20	ft	1	04/23/2024 9:19	R346336
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		2.7	NTU	1	04/23/2024 9:19	R346336
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		-110	mV	1	04/23/2024 9:19	R346336
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		400	µS/cm	1	04/23/2024 9:19	R346336
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		15.2	°C	1	04/23/2024 9:19	R346336
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.50	mg/L	1	04/23/2024 9:19	R346336
SW-846 9040B FIELD									
pH	*	0	1.00		6.37		1	04/23/2024 9:19	R346336
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		290	mg/L	1	04/24/2024 10:02	R346304
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		40	mg/L	1	04/25/2024 23:42	R346337
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.26	mg/L	1	04/30/2024 11:29	R346519
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		11	mg/L	1	04/25/2024 23:42	R346372
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0723	0.100		45.1	mg/L	1	04/24/2024 16:46	221874
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 16:32	221874
Arsenic	NELAP	0.0004	0.0010	J	0.0009	mg/L	5	04/24/2024 16:32	221874
Barium	NELAP	0.0007	0.0010		0.255	mg/L	5	04/24/2024 16:32	221874
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 16:32	221874
Boron	NELAP	0.0092	0.025	J	0.020	mg/L	5	04/30/2024 18:24	221874
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	04/24/2024 16:32	221874
Chromium	NELAP	0.0008	0.0015	J	0.0012	mg/L	5	04/24/2024 16:32	221874
Cobalt	NELAP	0.0001	0.0010		0.0039	mg/L	5	04/24/2024 16:32	221874
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 16:32	221874
Lithium	*	0.0015	0.0030	J	0.0030	mg/L	5	04/25/2024 16:27	221874
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	05/02/2024 10:59	221874
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	04/24/2024 16:32	221874
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	04/24/2024 16:32	221874
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020	J	0.00006	mg/L	1	05/10/2024 9:26	222725

Sample Summary

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
24041007-001	G001D	Groundwater	2	04/22/2024 12:01
24041007-002	G002D	Groundwater	2	04/22/2024 12:59
24041007-003	G003	Groundwater	2	04/22/2024 14:26
24041007-004	G005	Groundwater	2	04/23/2024 11:18
24041007-005	G006	Groundwater	2	04/23/2024 15:17
24041007-006	G007	Groundwater	2	04/23/2024 11:30
24041007-007	G008	Groundwater	2	04/23/2024 9:51
24041007-008	G009	Groundwater	2	04/23/2024 8:42
24041007-009	G010	Groundwater	2	04/22/2024 15:16
24041007-010	G011	Groundwater	2	04/22/2024 12:36
24041007-011	G051D	Groundwater	2	04/22/2024 15:02
24041007-012	G052D	Groundwater	2	04/23/2024 9:19
24041007-013	G053D	Groundwater	2	04/23/2024 10:30
24041007-014	G054D	Groundwater	2	04/22/2024 14:04
24041007-018	XSG01	Groundwater	1	04/22/2024 11:09
24041007-019	YSG03	Groundwater	1	04/22/2024 13:17
24041007-020	Field Blank	Aqueous	2	04/23/2024 12:30
24041007-021	G052D Duplicate	Groundwater	2	04/23/2024 9:19



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll
Client Project: JOP-24Q2

Work Order: 24041007
Report Date: 15-May-24

STANDARD METHODS 2510 B FIELD

Batch R346336		SampType: LCS		Units µS/cm							
SampleID: LCS-1											Date
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed
Spec. Conductance, Field		*	0		1410	1412	0	100.1	90	110	04/22/2024
Spec. Conductance, Field		*	0		1410	1412	0	100.1	90	110	04/22/2024

Batch	R346336	SampType:	LCS	Units µS/cm							
SampID:		LCS-2									Date
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
Spec. Conductance, Field	*	0		1410	1412	0	100.0	90	110	04/23/2024	
Spec. Conductance, Field	*	0		1410	1412	0	99.8	90	110	04/23/2024	

SW-846 9040B FIELD

Batch R346336		SampType: LCS		Units							
SampID: LCS-1											Date
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
pH	*	1.00		7.00	7.000	0	100.0	98.57	101.4	04/22/2024	
pH	*	1.00		7.08	7.000	0	101.1	98.57	101.4	04/22/2024	

Batch R346336		SampType: LCS		Units							
SampID: LCS-2											Date
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
pH	*	1.00		7.01	7.000	0	100.1	98.57	101.4	04/23/2024	
pH	*	1.00		7.08	7.000	0	101.1	98.57	101.4	04/23/2024	

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R346304		SampType: MBLK		Units mg/L							
SampID: MBLK											Date
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	04/24/2024	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	04/24/2024	

Batch	R346304	SampType:	LCS	Units							mg/L	
SampleID:		LCS									Date	
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed		
Total Dissolved Solids		20		942	1000	0	94.2	90	110	04/24/2024		
Total Dissolved Solids		20		924	1000	0	92.4	90	110	04/24/2024		



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

SW-846 9036 (TOTAL)

Batch R346337		SampType: MSD		Units mg/L				RPD Limit 10			Date Analyzed	
SampID: 24041007-001AMSD												
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Sulfate			20		80	40.00	42.25	94.1	79.05	1.04	04/25/2024	

Batch R346337		SampType: MS		Units mg/L							
SampID: 24041285-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		34	20.00	15.45	93.4	85	115	04/26/2024	

Batch R346337		SampType: MSD		Units mg/L				RPD Limit 10			Date Analyzed
SampID: 24041285-001AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	
Sulfate			10		34	20.00	15.45	95.1	34.14	0.96	04/26/2024

Batch R346337		SampType: MS		Units mg/L							
SampID: 24041708-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		200		680	400.0	305.9	93.5	85	115	04/25/2024	

Batch R346337		SampType: MSD		Units mg/L				RPD Limit 10			Date Analyzed	
SampID: 24041708-001AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Sulfate		200		679	400.0	305.9	93.2	679.9	0.20	04/25/2024		

Batch R346337		SampType: MS		Units mg/L							
SampID: 24041863-009AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		20		85	40.00	49.46	88.6	85	115	04/25/2024	

Batch R346337		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 24041863-009AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate			20		87	40.00	49.46	95.1	84.90	3.00	04/25/2024

Batch R346337		SampType: MS		Units mg/L							
SampID: 24041957-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		50	E	252	100.0	159.2	92.6	90	110	04/25/2024	



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

SW-846 9036 (TOTAL)

Batch R346337		SampType: MSD		Units mg/L				RPD Limit 10			Date Analyzed
SampID: 24041957-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Sulfate		50	E	255	100.0	159.2	95.7	251.8	1.24	04/25/2024	

Batch R346424		SampType: MBLK		Units mg/L							
SampID: ICB/MBLK											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate			10		< 10	6.140	0	0	-100	100	04/26/2024

Batch R346424		SampType: LCS		Units mg/L							
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		19	20.00	0	93.2	90	110	04/26/2024	

Batch R346424		SampType: MS		Units mg/L							
SampID: 24041863-001AMS											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		50		169	100.0	73.98	94.6	85	115	04/26/2024	

Batch R346424		SampType: MSD		Units mg/L				RPD Limit 10			Date Analyzed	
SampID: 24041863-001AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Sulfate		50		172	100.0	73.98	98.5	168.6	2.24	04/26/2024		

Batch R346424		SampType: MS		Units mg/L							
SampID: 24041863-006AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		100		424	200.0	236.3	93.8	85	115	04/26/2024	

Batch R346424		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 24041863-006AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate			100		439	200.0	236.3	101.2	424.0	3.41	04/26/2024

Batch R346424		SampType: MS		Units mg/L							
SampID: 24041980-003BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		20		99	40.00	63.81	88.2	85	115	04/26/2024	



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll
Client Project: JOP-24Q2

Work Order: 24041007
Report Date: 15-May-24

SW-846 9036 (TOTAL)

Batch R346424		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 24041980-003BMSD											Date Analyzed
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	
Sulfate			20	E	100	40.00	63.81	91.0	99.08	1.13	04/26/2024

Batch R346424		SampType: MS		Units mg/L						
SampID: 24041980-003CMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		20	E	102	40.00	63.66	95.0	85	115	04/26/2024

Batch R346424		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 24041980-003CMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate			20	E	100	40.00	63.66	90.9	101.7	1.66	04/26/2024

Batch R346424		SampType: MS		Units mg/L							
SampID: 24042058-006FMS											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		50		175	100.0	84.37	90.7	85	115	04/26/2024	

Batch R346424		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 24042058-006FMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate			50		174	100.0	84.37	89.8	175.1	0.55	04/26/2024

Batch R346424		SampType: MS		Units mg/L							
SampID: 24042147-002AMS											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		10	S	40	20.00	21.93	89.6	90	110	04/26/2024	

Batch R346424		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 24042147-002AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate			10		40	20.00	21.93	92.0	39.85	1.17	04/26/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

SW-846 9214 (TOTAL)

Batch R346519		SampType: MBLK		Units mg/L							
SampID: MBLK											Date
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
Fluoride		0.10		< 0.10	0.0500	0	0	-100	100	04/30/2024	

Batch R346519		SampType: LCS		Units mg/L							
SampID: LCS											Date
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
Fluoride		0.10		1.01	1.000	0	101.0	90	110	04/30/2024	

Batch R346519		SampType: MS		Units mg/L							
SampID: 24041007-007AMS											Date
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
Fluoride		0.10		2.60	2.000	0.2830	116.0	75	125	04/30/2024	

Batch R346519		SampType: MSD		Units mg/L					RPD Limit 15		
SampID: 24041007-007AMSD											Date Analyzed
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	
Fluoride			0.10		2.52	2.000	0.2830	111.8	2.603	3.28	04/30/2024

Batch R346519		SampType: MS		Units mg/L						
SampID: 24041007-015AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		2.21	2.000	0.1710	101.8	75	125	04/30/2024

Batch R346519		SampType: MSD		Units mg/L					RPD Limit 15		
SampID: 24041007-015AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.35	2.000	0.1710	109.0	2.208	6.27	04/30/2024	

Batch R346519		SampType: MS		Units mg/L							
SampID: 24041007-021AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.52	2.000	0.2640	112.6	75	125	04/30/2024	

Batch R346519		SampType: MSD		Units mg/L					RPD Limit 15		
SampID: 24041007-021AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.41	2.000	0.2640	107.3	2.517	4.34	04/30/2024	



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

SW-846 9214 (TOTAL)

Batch R346519		SampType: MS		Units mg/L						
SampID: 24041957-001AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		2.76	2.000	0.5750	109.3	75	125	04/30/2024

Batch R346519		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed
SampID: 24041957-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Fluoride		0.10		2.56	2.000	0.5750	99.0	2.761	7.71	04/30/2024	

Batch R346519		SampType: MS		Units mg/L						
SampID: 24042185-001AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		2.80	2.000	0.6310	108.6	75	125	04/30/2024

Batch R346519		SampType: MSD		Units mg/L					RPD Limit 15		Date Analyzed
SampID: 24042185-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Fluoride		0.10		2.75	2.000	0.6310	106.0	2.804	1.94	04/30/2024	

SW-846 9251 (TOTAL)

Batch R346372		SampType: MBLK		Units mg/L							
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		< 4	0.5000	0	0	-100	100	04/25/2024	

Batch R346372		SampType: LCS		Units mg/L							
SampID: ICB/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		20	20.00	0	98.2	90	110	04/25/2024	

Batch R346372		SampType: MS		Units mg/L						
SampID: 24041007-001AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		33	20.00	15.78	87.6	85	115	04/25/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

SW-846 9251 (TOTAL)

Batch R346372		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed
SampID: 24041007-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Chloride		4		33	20.00	15.78	88.4	33.30	0.45	04/25/2024	

Batch R346372		SampType: MS		Units mg/L							
SampID: 24041285-001AMS											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Chloride		4		28	20.00	10.65	88.4	85	115	04/26/2024	

Batch R346372		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed
SampID: 24041285-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Chloride		4		29	20.00	10.65	89.8	28.32	1.05	04/26/2024	

Batch R346372		SampType: MS		Units mg/L							
SampID: 24041863-001AMS											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Chloride		4		39	20.00	20.61	89.8	85	115	04/25/2024	

Batch R346372		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24041863-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		39	20.00	20.61	90.0	38.57	0.10	04/25/2024	

Batch R346372		SampType: MS		Units mg/L							
SampID: 24041863-006AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		22	20.00	3.420	92.0	85	115	04/25/2024	

Batch R346372		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24041863-006AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		22	20.00	3.420	92.8	21.81	0.73	04/25/2024	

Batch R346372		SampType: MS		Units mg/L							
SampID: 24041863-009AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		23	20.00	4.520	92.4	85	115	04/25/2024	



Quality Control Results

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Client: Ramboll
Client Project: JOP-24Q2

Work Order: 24041007
Report Date: 15-May-24

SW-846 9251 (TOTAL)

Batch R346372		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed	
SampID: 24041863-009AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Chloride		4		23	20.00	4.520	92.0	23.00	0.39	04/25/2024		

Batch R346372		SampType: MS		Units mg/L							
SampID: 24041957-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		20		119	100.0	27.06	91.8	85	115	04/25/2024	

Batch R346372		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed
SampID: 24041957-001AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	
Chloride			20		120	100.0	27.06	93.3	118.9	1.20	04/25/2024

Batch R346436		SampType: MBLK		Units mg/L							
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		< 4	0.5000	0	0	-100	100	04/26/2024	

Batch R346436		SampType: LCS		Units mg/L							
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		20	20.00	0	99.9	90	110	04/26/2024	

Batch R346436		SampType: MS		Units mg/L							
SampID: 24042058-006FMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		20		148	100.0	61.53	86.4	85	115	04/26/2024	

Batch R346436		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24042058-006FMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		20		147	100.0	61.53	85.7	147.9	0.47	04/26/2024	

Batch R346436		SampType: MS		Units mg/L							
SampID: 24042147-002AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		24	20.00	5.460	93.5	85	115	04/26/2024	



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

SW-846 9251 (TOTAL)

Batch	R346436	SampType:	MSD	Units				mg/L	RPD Limit			15
SampID: 24042147-002AMSD												Date
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date	Analyzed	
Chloride		4		24	20.00	5.460	93.4	24.15	0.08	04/26/2024		

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 221253		SampType: MBLK		Units mg/L						
SampID: MBLK-221253										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	04/25/2024
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	04/25/2024
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	04/25/2024
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	04/25/2024

Batch 221253		SampType: LCS		Units mg/L						
SampID: LCS-221253										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		2.64	2.500	0	105.6	85	115	04/25/2024
Magnesium		0.0500		2.44	2.500	0	97.7	85	115	04/25/2024
Potassium		0.100		2.68	2.500	0	107.2	85	115	04/25/2024
Sodium		0.0500		2.74	2.500	0	109.5	85	115	04/25/2024

Batch 221253		SampType: MS		Units mg/L						
SampID: 24041007-005BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	93.8	2.500	85.98	314.0	75	125	04/25/2024
Magnesium		0.0500	S	27.8	2.500	23.71	163.2	75	125	04/25/2024
Potassium		0.100		5.46	2.500	2.646	112.6	75	125	04/25/2024
Sodium		0.0500	S	49.3	2.500	44.79	181.6	75	125	04/25/2024

Batch	221253	SampType:	MSD	Units				mg/L	RPD Limit			20
SampID: 24041007-005BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Calcium		0.100	S	90.7	2.500	85.98	187.6	93.83	3.43	04/25/2024		
Magnesium		0.0500	S	26.9	2.500	23.71	129.8	27.79	3.06	04/25/2024		
Potassium		0.100		5.37	2.500	2.646	108.9	5.462	1.70	04/25/2024		
Sodium		0.0500		47.8	2.500	44.79	120.8	49.33	3.13	04/25/2024		



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 221874 SampType: MBLK Units mg/L

SampID: MBLK-221874

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	04/24/2024
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	04/26/2024
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	04/24/2024
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	04/24/2024
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	04/26/2024
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	04/24/2024
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	04/26/2024

Batch 221874 SampType: LCS Units mg/L

SampID: LCS-221874

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		2.52	2.500	0	100.9	85	115	04/24/2024
Magnesium		0.0500		2.50	2.500	0	99.9	85	115	04/26/2024
Magnesium		0.0500		2.52	2.500	0	101.0	85	115	04/24/2024
Potassium		0.100		2.56	2.500	0	102.5	85	115	04/24/2024
Potassium		0.100		2.63	2.500	0	105.2	85	115	04/26/2024
Sodium		0.0500		2.64	2.500	0	105.6	85	115	04/26/2024
Sodium		0.0500		2.51	2.500	0	100.3	85	115	04/24/2024

Batch 221874 SampType: MS Units mg/L

SampID: 24041007-003BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		48.1	2.500	45.19	115.6	75	125	04/24/2024
Magnesium		0.0500		17.7	2.500	15.09	104.0	75	125	04/24/2024
Potassium		0.100		3.98	2.500	1.331	106.1	75	125	04/24/2024
Sodium		0.0500		35.8	2.500	33.18	106.0	75	125	04/24/2024

Batch 221874 SampType: MSD Units mg/L

RPD Limit 20

SampID: 24041007-003BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100		47.7	2.500	45.19	99.6	48.08	0.84	04/24/2024
Magnesium		0.0500		17.6	2.500	15.09	101.8	17.69	0.31	04/24/2024
Potassium		0.100		4.00	2.500	1.331	106.7	3.984	0.40	04/24/2024
Sodium		0.0500		35.5	2.500	33.18	92.0	35.83	0.98	04/24/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 221874 SampType: MS Units mg/L

SampleID: 24041007-012BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	49.0	2.500	45.46	143.6	75	125	04/24/2024
Magnesium		0.0500		17.5	2.500	14.60	115.8	75	125	04/24/2024
Potassium		0.100		3.34	2.500	0.7220	104.9	75	125	04/24/2024
Sodium		0.0500		30.1	2.500	27.69	95.2	75	125	04/24/2024

Batch 221874 SampType: MSD Units mg/L

RPD Limit 20

SampleID: 24041007-012BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100		48.0	2.500	45.46	100.4	49.05	2.23	04/24/2024
Magnesium		0.0500		17.1	2.500	14.60	101.5	17.49	2.07	04/24/2024
Potassium		0.100		3.34	2.500	0.7220	104.6	3.345	0.26	04/24/2024
Sodium		0.0500		29.8	2.500	27.69	83.6	30.07	0.97	04/24/2024

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 221253 SampType: MBLK Units mg/L

SampleID: MBLK-221253

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	04/25/2024
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	04/25/2024
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	04/25/2024
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	04/25/2024
Boron	*	0.0250		< 0.0250	0.0093	0	0	-100	100	04/25/2024
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	04/25/2024
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	04/25/2024
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	04/25/2024
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	04/25/2024
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	04/25/2024
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	05/02/2024
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	04/25/2024
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	04/25/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 221253 SampType: LCS Units mg/L

SampID: LCS-221253

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.475	0.5000	0	95.1	85	115	04/25/2024
Arsenic		0.0010		0.473	0.5000	0	94.7	85	115	04/25/2024
Barium		0.0010		1.89	2.000	0	94.7	85	115	04/25/2024
Beryllium		0.0010		0.0489	0.0500	0	97.7	85	115	04/25/2024
Boron	*	0.0250		0.544	0.5000	0	108.7	85	115	04/30/2024
Cadmium		0.0010		0.0481	0.0500	0	96.1	85	115	04/25/2024
Chromium		0.0015		0.197	0.2000	0	98.7	85	115	04/25/2024
Cobalt		0.0010		0.476	0.5000	0	95.3	85	115	04/25/2024
Lead		0.0010		0.465	0.5000	0	93.1	85	115	04/25/2024
Lithium	*	0.0030		0.505	0.5000	0	100.9	85	115	04/25/2024
Molybdenum		0.0015		0.471	0.5000	0	94.1	80	120	05/03/2024
Selenium		0.0010		0.499	0.5000	0	99.8	85	115	04/25/2024
Thallium		0.0020		0.255	0.2500	0	102.1	85	115	04/30/2024

Batch 221253 SampType: MS Units mg/L

SampID: 24041007-005BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.493	0.5000	0	98.6	75	125	04/25/2024
Arsenic		0.0010		0.494	0.5000	0.001988	98.3	75	125	04/25/2024
Barium		0.0010		2.06	2.000	0.04527	100.8	75	125	04/25/2024
Beryllium		0.0010		0.0504	0.0500	0.0003039	100.3	75	125	04/25/2024
Boron		0.0250	S	3.80	0.5000	3.166	125.9	75	125	04/30/2024
Cadmium		0.0010		0.0489	0.0500	0	97.9	75	125	04/25/2024
Chromium		0.0015		0.210	0.2000	0.008378	101.0	75	125	04/25/2024
Cobalt		0.0010		0.477	0.5000	0.002116	95.0	75	125	04/25/2024
Lead		0.0010		0.480	0.5000	0.002429	95.6	75	125	04/25/2024
Lithium	*	0.0030		0.526	0.5000	0.006189	104.0	75	125	04/25/2024
Molybdenum		0.0015		0.420	0.5000	0	84.1	75	125	05/06/2024
Selenium		0.0010		0.520	0.5000	0	104.0	75	125	04/25/2024
Thallium		0.0020		0.267	0.2500	0	106.6	75	125	04/30/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch	221253	SampType:	MSD	Units	mg/L	RPD Limit					20
SampID: 24041007-005BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Antimony		0.0010		0.470	0.5000	0	94.0	0.4931	4.75	04/25/2024	
Arsenic		0.0010		0.477	0.5000	0.001988	95.1	0.4937	3.37	04/25/2024	
Barium		0.0010		1.92	2.000	0.04527	93.6	2.061	7.20	04/25/2024	
Beryllium		0.0010		0.0490	0.0500	0.0003039	97.3	0.05043	2.93	04/25/2024	
Boron		0.0250		3.61	0.5000	3.166	87.9	3.795	5.14	04/30/2024	
Cadmium		0.0010		0.0473	0.0500	0	94.7	0.04893	3.32	04/25/2024	
Chromium		0.0015		0.203	0.2000	0.008378	97.5	0.2103	3.30	04/25/2024	
Cobalt		0.0010		0.467	0.5000	0.002116	92.9	0.4773	2.21	04/25/2024	
Lead		0.0010		0.470	0.5000	0.002429	93.5	0.4803	2.19	04/25/2024	
Lithium	*	0.0030		0.505	0.5000	0.006189	99.8	0.5262	4.12	04/25/2024	
Molybdenum		0.0015		0.431	0.5000	0	86.3	0.4203	2.61	05/06/2024	
Selenium		0.0010		0.494	0.5000	0	98.7	0.5200	5.18	04/25/2024	
Thallium		0.0020		0.257	0.2500	0	102.7	0.2665	3.74	04/30/2024	

Batch	221874	SampType:	MBLK	Units mg/L						
SampID: MBLK-221874										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	04/24/2024
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	04/24/2024
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	04/24/2024
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	04/24/2024
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	04/24/2024
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	04/24/2024
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	04/24/2024
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	04/24/2024
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	04/24/2024
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	04/25/2024
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	04/24/2024
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	04/24/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 221874 SampType: LCS Units mg/L

SampID: LCS-221874

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.492	0.5000	0	98.3	80	120	04/24/2024
Arsenic		0.0010		0.507	0.5000	0	101.5	80	120	04/24/2024
Barium		0.0010		2.03	2.000	0	101.5	80	120	04/24/2024
Beryllium		0.0010		0.0516	0.0500	0	103.1	80	120	04/24/2024
Boron		0.0250		0.524	0.5000	0	104.9	80	120	04/24/2024
Cadmium		0.0010		0.0506	0.0500	0	101.2	80	120	04/24/2024
Chromium		0.0015		0.204	0.2000	0	102.2	80	120	04/24/2024
Lead		0.0010		0.484	0.5000	0	96.7	80	120	04/24/2024
Lithium	*	0.0030		0.527	0.5000	0	105.4	80	120	04/25/2024
Molybdenum		0.0015		0.443	0.5000	0	88.7	80	120	04/25/2024
Selenium		0.0010		0.526	0.5000	0	105.1	80	120	04/24/2024
Thallium		0.0020		0.239	0.2500	0	95.5	80	120	04/24/2024

Batch 221874 SampType: MS Units mg/L

SampID: 24041007-003BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.520	0.5000	0	104.0	75	125	04/24/2024
Arsenic		0.0010		0.513	0.5000	0.001596	102.2	75	125	04/24/2024
Barium		0.0010		2.12	2.000	0.06466	102.8	75	125	04/24/2024
Beryllium		0.0010		0.0492	0.0500	0.0002841	97.9	75	125	04/24/2024
Boron		0.0250		0.840	0.5000	0.2798	112.0	75	125	04/30/2024
Cadmium		0.0010		0.0523	0.0500	0	104.6	75	125	04/24/2024
Chromium		0.0015		0.214	0.2000	0.008533	102.8	75	125	04/24/2024
Cobalt		0.0010		0.482	0.5000	0.002277	95.8	75	125	04/24/2024
Lead		0.0010		0.496	0.5000	0.001672	98.8	75	125	04/24/2024
Lithium	*	0.0030		0.522	0.5000	0.002267	104.0	75	125	04/25/2024
Molybdenum		0.0015		0.389	0.5000	0	77.8	75	125	05/02/2024
Selenium		0.0010		0.513	0.5000	0	102.6	75	125	04/24/2024
Thallium		0.0020		0.245	0.2500	0.001552	97.3	75	125	04/24/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 221874		SampType: MSD		Units mg/L				RPD Limit 20		
SampID: 24041007-003BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		0.504	0.5000	0	100.8	0.5198	3.06	04/24/2024
Arsenic		0.0010		0.505	0.5000	0.001596	100.7	0.5126	1.51	04/24/2024
Barium		0.0010		2.10	2.000	0.06466	101.9	2.121	0.86	04/24/2024
Beryllium		0.0010		0.0497	0.0500	0.0002841	98.8	0.04924	0.94	04/24/2024
Boron		0.0250		0.819	0.5000	0.2798	107.9	0.8400	2.51	04/30/2024
Cadmium		0.0010		0.0511	0.0500	0	102.2	0.05230	2.33	04/24/2024
Chromium		0.0015		0.221	0.2000	0.008533	106.0	0.2141	2.95	04/24/2024
Cobalt		0.0010		0.491	0.5000	0.002277	97.8	0.4815	2.03	04/24/2024
Lead		0.0010		0.493	0.5000	0.001672	98.2	0.4956	0.61	04/24/2024
Lithium	*	0.0030		0.507	0.5000	0.002267	101.0	0.5224	2.94	04/25/2024
Molybdenum		0.0015		0.385	0.5000	0	76.9	0.3892	1.18	05/02/2024
Selenium		0.0010		0.504	0.5000	0	100.7	0.5129	1.84	04/24/2024
Thallium		0.0020		0.245	0.2500	0.001552	97.5	0.2449	0.22	04/24/2024

Batch 221874		SampType: MS		Units mg/L						
SampID: 24041007-012BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.501	0.5000	0	100.2	75	125	04/24/2024
Arsenic		0.0010		0.503	0.5000	0.001178	100.3	75	125	04/24/2024
Barium		0.0010		2.27	2.000	0.2586	100.6	75	125	04/24/2024
Beryllium		0.0010		0.0505	0.0500	0	101.0	75	125	04/24/2024
Boron		0.0250		0.526	0.5000	0.01852	101.6	75	125	04/25/2024
Cadmium		0.0010		0.0503	0.0500	0	100.7	75	125	04/24/2024
Chromium		0.0015		0.205	0.2000	0.001076	102.1	75	125	04/24/2024
Cobalt		0.0010		0.489	0.5000	0.003463	97.2	75	125	04/24/2024
Lead		0.0010		0.500	0.5000	0	100.0	75	125	04/24/2024
Lithium	*	0.0030		0.516	0.5000	0.002604	102.8	75	125	04/25/2024
Molybdenum		0.0015		0.437	0.5000	0.0007122	87.3	75	125	04/25/2024
Selenium		0.0010		0.493	0.5000	0	98.5	75	125	04/24/2024
Thallium		0.0020		0.220	0.2500	0	88.0	75	125	04/24/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 221874		SampType: MSD		Units mg/L				RPD Limit 20		
SampleID: 24041007-012BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		0.513	0.5000	0	102.6	0.5011	2.36	04/24/2024
Arsenic		0.0010		0.511	0.5000	0.001178	101.9	0.5027	1.57	04/24/2024
Barium		0.0010		2.32	2.000	0.2586	102.9	2.270	2.02	04/24/2024
Beryllium		0.0010		0.0500	0.0500	0	100.1	0.05051	0.94	04/24/2024
Boron		0.0250		0.554	0.5000	0.01852	107.0	0.5263	5.08	04/25/2024
Cadmium		0.0010		0.0510	0.0500	0	102.0	0.05035	1.32	04/24/2024
Chromium		0.0015		0.206	0.2000	0.001076	102.4	0.2053	0.29	04/24/2024
Cobalt		0.0010		0.490	0.5000	0.003463	97.4	0.4894	0.20	04/24/2024
Lead		0.0010		0.495	0.5000	0	98.9	0.5000	1.07	04/24/2024
Lithium	*	0.0030		0.527	0.5000	0.002604	105.0	0.5164	2.12	04/25/2024
Molybdenum		0.0015		0.443	0.5000	0.0007122	88.5	0.4371	1.39	04/25/2024
Selenium		0.0010		0.506	0.5000	0	101.2	0.4926	2.70	04/24/2024
Thallium		0.0020		0.234	0.2500	0	93.6	0.2201	6.15	04/24/2024

SW-846 7470A (TOTAL)

Batch 222008		SampType: MBLK		Units mg/L						
SampleID: MBLK-222008										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		< 0.00020	0.0001	0	0	-100	100	04/26/2024

Batch 222008		SampType: LCS		Units mg/L						
SampleID: LCS-222008										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00512	0.0050	0	102.4	85	115	04/26/2024

Batch 222008		SampType: MS		Units mg/L						
SampleID: 24041663-001BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00510	0.0050	0	102.0	75	125	04/26/2024

Batch 222008		SampType: MSD		Units mg/L				RPD Limit 15			
SampleID: 24041663-001BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury			0.00020		0.00546	0.0050	0	109.1	0.005102	6.69	04/26/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll
Client Project: JOP-24Q2

Work Order: 24041007
Report Date: 15-May-24

SW-846 7470A (TOTAL)

Batch 222008		SampType: MS		Units mg/L							
SampID: 24041664-001BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00511	0.0050	0	102.1	75	125	04/26/2024	

Batch 222008		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24041664-001BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		0.00509	0.0050	0	101.9	0.005105	0.21	04/26/2024	

Batch 222013		SampType: MBLK		Units mg/L							
SampID: MBLK-222013											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		< 0.00020	0.0001	0	0	-100	100	04/26/2024	

Batch 222013		SampType: LCS		Units mg/L							
SampID: LCS-222013											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00503	0.0050	0	100.6	85	115	04/26/2024	

Batch 222013		SampType: MS		Units mg/L							
SampID: 24041007-021BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00559	0.0050	0.0006545	98.7	75	125	05/01/2024	

Batch 222013		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24041007-021BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		0.00554	0.0050	0.0006545	97.8	0.005591	0.83	05/01/2024	

Batch 222013		SampType: MS		Units mg/L							
SampID: 24041939-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00518	0.0050	0.0001131	101.3	75	125	05/01/2024	

Batch 222013		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24041939-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		0.00511	0.0050	0.0001131	99.9	0.005176	1.28	05/01/2024	



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

SW-846 7470A (TOTAL)

Batch 222725 SampType: MBLK Units mg/L

SampID: MBLK-222725

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		< 0.00020	0.0001	0	0	-100	100	05/10/2024

Batch 222725 SampType: LCS Units mg/L

SampID: LCS-222725

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00473	0.0050	0	94.6	85	115	05/10/2024



Receiving Check List

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041007

Client Project: JOP-24Q2

Report Date: 15-May-24

Carrier: Brett Gillihan

Received By: PRS

Completed by:

On:

23-Apr-24

Paul Schultz

Reviewed by:

On:

24-Apr-24

Ellie Hopkins

Pages to follow:

Chain of custody

4

Extra pages included

0

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C 5.7

Type of thermal preservation?

None ☐

Ice ☒

Blue Ice ☐

Dry Ice ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☒

Lab ☐

NA ☐

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water - at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☐

No ☒

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

Any No responses must be detailed below or on the COC.

pH strip #96651. LM - pschultz - 4/23/2024 4:13:17 PM

Samples were received on 4/24/2024 at 1833 on ice [5.2C - LTG#9]. - pschultz - 4/24/2024 8:11:22 AM

pH strip #96651. - pschultz - 4/24/2024 8:13:11 AM

Additional Nitric Acid (97291) was needed in G006 upon arrival at the laboratory. - pschultz - 4/24/2024 8:13:28 AM

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 1 of 2	
Company: Vistra Corp-Joppa		Report To: Brian Voelker		Attention: Brian Voelker		REGULATORY AGENCY NPDES GROUND WATER DRINKING WATER UST RCRA OTHER Site Location IL STATE:	
Address: 2100 Portland Road		Copy To: Sam Davies: samantha.davies@vistracorp.com		Company Name: Vistra Corp			
Joppa, IL 62953		Roger Faughn - roger.faughn@vistracorp.com		Address: see Section A			
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:			
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:			
Requested Due Date/TAT: 10 day		Project Number: 2285		Profile #:			

ITEM #	Section D Required Client Information	Valid Matrix Codes										MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test	Requested Analysis Filtered (Y/N)												Residual Chlorine (Y/N)	Project No./ Lab I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
		MATRIX												DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		JOP-257-401	JOP-845-401																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														

JOP-24Q2 Rev 0

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Bret Gilligan	4/23/24	15:24	Bret Gilligan	4/23/24	1524	55	7	z	

phv:96651 um 4/23

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Bret Gilligan				
SIGNATURE of SAMPLER:	Bret Gilligan				
DATE Signed (MM/DD/YYYY):		4-23-24			

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 2

Company: Vistra Corp-Joppa		Report To: Brian Voelker	Attention: Brian Voelker	REGULATORY AGENCY		
Address: 2100 Portland Road		Copy To: Sam Davies: samantha.davies@vistracorp.com	Company Name: Vistra Corp			
Joppa, IL 62953		Roger Faughn - roger.faughn@vistracorp.com	Address: see Section A	NPDES	GROUND WATER	DRINKING WATER
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:	Quote Reference:	UST	RCRA	OTHER
Phone: (217) 753-8911	Fax:	Project Name:	Project Manager:	Site Location	IL	
Requested Due Date/TAT: 10 day		Project Number: 2285	Profile #:	STATE:		

[illegible]

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <i>Veit Gillman</i>					
SIGNATURE of SAMPLER: <i>[Signature]</i>	DATE Signed (MM/DD/YY): <i>4-23-24</i>				

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 2

ITEM #	Section D Required Client Information	Valid Matrix Codes DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT SOLID/SOLID SL OIL WP WIPE AR AIR QT OTHER TS	MATRIX CODE (see valid codes to list)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test Y/N	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	Project No./ Lab I.D.		
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		JOP-257-401	JOP-845-401												
1	G001D	WT	G				2	1	1									X	X											24041007-001	
2	G002D	WT	G				2	1	1									X	X											24041007-002	
3	G003	WT	G				2	1	1									X	X											24041007-003	
4	G005	WT	G				2	1	1									X	X											24041007-004	
5	G006	WT	G		4/23/24	1517	2	1	1									X	X											24041007-005	
6	G007	WT	G				2	1	1									X	X											24041007-006	
7	G008	WT	G				2	1	1									X	X											24041007-007	
8	G009	WT	G				2	1	1									X	X											24041007-008	
9	G010	WT	G				2	1	1									X	X											24041007-009	
10	G011	WT	G				2	1	1									X	X											24041007-010	
11	G051D	WT	G				2	1	1									X	X											24041007-011	
12	G052D	WT	G				2	1	1									X	X											24041007-012	
13	G053D	WT	G				2	1	1									X	X											24041007-013	
14	G054D	WT	G				2	1	1									X	X											24041007-014	
15	XPW01_pore	WT	G		4/23/24	1255	2	1	1										X											24041007-015	
16	XPW02_pore	WT	G		4/23/24	1335	2	1	1										X											24041007-016	
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS																	
JOP-24Q2 Rev 0		Daniel Crump		4-23		18:33		Paul Z. Hertz		4/23/24		1833		-S2 (2) z																	

Added HNO_3 (8791) to sample 6060
15 4/24

Confidential

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

JOP-257-401

Page: 2 of 2

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Tracy Carroll					
SIGNATURE of SAMPLER: [Signature]	DATE Signed (MM/DD/YY): 4/23/24				

May 29, 2024

Eric Bauer
Ramboll
234 W. Florida Street
Fifth Floor
Milwaukee, WI 53204
TEL: (414) 837-3607
FAX: (414) 837-3608



Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: JOP-24Q2

WorkOrder: 24041008

Dear Eric Bauer:

TEKLAB, INC received 16 samples on 4/23/2024 6:33:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Elizabeth A. Hurley
Director of Customer Service
(618)344-1004 ex 33
ehurley@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041008

Client Project: JOP-24Q2

Report Date: 29-May-24

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Sample Summary	23
Receiving Check List	24
Chain of Custody	Appended

Definitions

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041008

Client Project: JOP-24Q2

Report Date: 29-May-24

Abbr Definition

* Analytes on report marked with an asterisk are not NELAP accredited

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.

DNI Did not ignite

DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

TNTC Too numerous to count (> 200 CFU)



Definitions

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041008

Client Project: JOP-24Q2

Report Date: 29-May-24

Qualifiers

# - Unknown hydrocarbon	B - Analyte detected in associated Method Blank
C - RL shown is a Client Requested Quantitation Limit	E - Value above quantitation range
H - Holding times exceeded	I - Associated internal standard was outside method criteria
J - Analyte detected below quantitation limits	M - Manual Integration used to determine area response
ND - Not Detected at the Reporting Limit	R - RPD outside accepted recovery limits
S - Spike Recovery outside recovery limits	T - TIC(Tentatively identified compound)
X - Value exceeds Maximum Contaminant Level	



Case Narrative

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041008

Client Project: JOP-24Q2

Report Date: 29-May-24

Cooler Receipt Temp: 5.7 °C

An employee of Teklab, Inc. collected the sample(s).

Equipment Blanks were not needed.

Ra226/228 analyses were performed by Eurofins St. Louis. See attached report for results and QC.

This report was revised on May 29, 2024 per Eric Bauer's request. The reason for the revision is to correct collection times for G001D, G002D, G003, G005, G051D, and Field Blank per field file. Please replace report dated May 22, 2024 with this report. EAH 5/29/24

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com



Accreditations

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041008

Client Project: JOP-24Q2

Report Date: 29-May-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Illinois	IEPA	1004652024-2	NELAP	4/30/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2025	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2025	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2026	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Mississippi	MSDH			4/30/2025	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041008-001
Matrix: GROUNDWATER

Work Order: 24041008
Report Date: 29-May-24
Client Sample ID: G001D
Collection Date: 04/22/2024 12:01

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	05/20/2024 12:32	R347659



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041008-002
Matrix: GROUNDWATER

Work Order: 24041008
Report Date: 29-May-24
Client Sample ID: G002D
Collection Date: 04/22/2024 12:59

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	05/20/2024 12:33	R347659



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041008-003
Matrix: GROUNDWATER

Work Order: 24041008
Report Date: 29-May-24
Client Sample ID: G003
Collection Date: 04/22/2024 14:26

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	05/20/2024 12:33	R347659



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041008-004
Matrix: GROUNDWATER

Work Order: 24041008
Report Date: 29-May-24
Client Sample ID: G005
Collection Date: 04/23/2024 11:18

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	05/20/2024 12:33	R347659



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041008-005
Matrix: GROUNDWATER

Work Order: 24041008
Report Date: 29-May-24
Client Sample ID: G006
Collection Date: 04/23/2024 15:17

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	05/20/2024 12:33	R347659



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041008-006
Matrix: GROUNDWATER

Work Order: 24041008
Report Date: 29-May-24
Client Sample ID: G007
Collection Date: 04/23/2024 11:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	05/20/2024 12:33	R347659



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041008-007
Matrix: GROUNDWATER

Work Order: 24041008
Report Date: 29-May-24
Client Sample ID: G008
Collection Date: 04/23/2024 9:51

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	05/20/2024 12:33	R347659



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041008-008
Matrix: GROUNDWATER

Work Order: 24041008
Report Date: 29-May-24
Client Sample ID: G009
Collection Date: 04/23/2024 8:42

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	05/20/2024 12:33	R347659



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041008-009
Matrix: GROUNDWATER

Work Order: 24041008
Report Date: 29-May-24
Client Sample ID: G010
Collection Date: 04/22/2024 15:16

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	05/20/2024 12:34	R347659



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041008-010
Matrix: GROUNDWATER

Work Order: 24041008
Report Date: 29-May-24
Client Sample ID: G011
Collection Date: 04/22/2024 12:36

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	05/20/2024 12:34	R347659



Client: Ramboll

Client Project: JOP-24Q2

Lab ID: 24041008-011

Matrix: GROUNDWATER

Work Order: 24041008

Report Date: 29-May-24

Client Sample ID: G051D

Collection Date: 04/22/2024 15:02

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	05/20/2024 12:34	R347659



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041008-012
Matrix: GROUNDWATER

Work Order: 24041008
Report Date: 29-May-24
Client Sample ID: G052D
Collection Date: 04/23/2024 9:19

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	05/20/2024 12:34	R347659



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041008-013
Matrix: GROUNDWATER

Work Order: 24041008
Report Date: 29-May-24
Client Sample ID: G053D
Collection Date: 04/23/2024 10:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	05/20/2024 12:34	R347659



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041008-014
Matrix: GROUNDWATER

Work Order: 24041008
Report Date: 29-May-24
Client Sample ID: G054D
Collection Date: 04/22/2024 14:04

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	05/20/2024 12:35	R347659



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041008-015
Matrix: AQUEOUS

Work Order: 24041008
Report Date: 29-May-24
Client Sample ID: Field Blank
Collection Date: 04/23/2024 12:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	05/20/2024 12:35	R347659



Client: Ramboll
Client Project: JOP-24Q2
Lab ID: 24041008-016
Matrix: GROUNDWATER

Work Order: 24041008
Report Date: 29-May-24
Client Sample ID: G052D Duplicate
Collection Date: 04/23/2024 9:19

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	05/20/2024 12:35	R347659

Sample Summary

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041008

Client Project: JOP-24Q2

Report Date: 29-May-24

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
24041008-001	G001D	Groundwater	1	04/22/2024 12:01
24041008-002	G002D	Groundwater	1	04/22/2024 12:59
24041008-003	G003	Groundwater	1	04/22/2024 14:26
24041008-004	G005	Groundwater	1	04/23/2024 11:18
24041008-005	G006	Groundwater	1	04/23/2024 15:17
24041008-006	G007	Groundwater	1	04/23/2024 11:30
24041008-007	G008	Groundwater	1	04/23/2024 9:51
24041008-008	G009	Groundwater	1	04/23/2024 8:42
24041008-009	G010	Groundwater	1	04/22/2024 15:16
24041008-010	G011	Groundwater	1	04/22/2024 12:36
24041008-011	G051D	Groundwater	1	04/22/2024 15:02
24041008-012	G052D	Groundwater	1	04/23/2024 9:19
24041008-013	G053D	Groundwater	1	04/23/2024 10:30
24041008-014	G054D	Groundwater	1	04/22/2024 14:04
24041008-015	Field Blank	Aqueous	1	04/23/2024 12:30
24041008-016	G052D Duplicate	Groundwater	1	04/23/2024 9:19



Receiving Check List

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24041008

Client Project: JOP-24Q2

Report Date: 29-May-24

Carrier: Brett Gillihan

Received By: NR

Completed by:

On:

23-Apr-24

Nick Reed

Reviewed by:

On:

24-Apr-24

Ellie Hopkins

Pages to follow: Chain of custody

Extra pages included

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐	Temp °C 5.7
Type of thermal preservation?	None ☐	Ice ☒	Blue Ice ☐	Dry Ice ☐
Chain of custody present?	Yes ☒	No ☐		
Chain of custody signed when relinquished and received?	Yes ☒	No ☐		
Chain of custody agrees with sample labels?	Yes ☒	No ☐		
Samples in proper container/bottle?	Yes ☒	No ☐		
Sample containers intact?	Yes ☒	No ☐		
Sufficient sample volume for indicated test?	Yes ☒	No ☐		
All samples received within holding time?	Yes ☒	No ☐		
Reported field parameters measured:	Field ☐	Lab ☐	NA ☒	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐		

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water – at least one vial per sample has zero headspace?	Yes ☐	No ☐	No VOA vials ☒
Water - TOX containers have zero headspace?	Yes ☐	No ☐	No TOX containers ☒
Water - pH acceptable upon receipt?	Yes ☐	No ☒	NA ☐
NPDES/CWA TCN interferences checked/treated in the field?	Yes ☐	No ☐	NA ☒

Any No responses must be detailed below or on the COC.

G052D Duplicate collection date per G052D marking. pH strip #96651. - nickreed - 4/23/2024 4:41:16 PM

Samples were received on 4/24/2024 at 18:33 on ice [5.2C - LTG#9]. - pschultz - 4/24/2024 8:16:32 AM

pH strip #96651. - pschultz - 4/24/2024 8:17:04 AM

Additional Nitric Acid (97291) was needed in G006 upon arrival at the laboratory. - pschultz - 4/24/2024 8:17:13 AM

CHAIN-OF-CUSTODY / Analytical Request Document

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24041008
JOP-24Q2-401

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 1 of 2	
Company: Vistra Corp-Joppa		Report To: Brian Voelker		Attention: Brian Voelker		REGULATORY AGENCY NPDES GROUND WATER DRINKING WATER UST RCRA OTHER Site Location: IL STATE:	
Address: 2100 Portland Road		Copy To: Sam Davies: samantha.davies@vistracorp.com		Company Name: Vistra Corp			
Joppa, IL 62953		Roger Faughn - roger.faughn@vistracorp.com		Address: see Section A			
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:			
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:			
Requested Due Date/TAT: 10 day		Project Number: 2285		Profile #:			

ITEM #	Section D Required Client Information	MATRIX CODES DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT SOIL/SOLID SL OIL WP WIPE AR AIR CT OTHER TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G-GRAB C-COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test Y/N	Requested Analysis Filtered (Y/N)												Residual Chlorine (Y/N)	Project No. / Lab I.D.
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other															
1	G001D	WT	G	4/22/24	1059	2	2								X	X												24041008-001			
2	G002D	WT	G		1219	2	2								X	X												24041008-002			
3	G003	WT	G		1313	2	2								X	X												24041008-003			
4	G005	WT	G	4/23/24	1124	2	2								X	X												24041008-004			
5	G006	WT	G	4/23/24	1030	2	2								X	X												24041008-005			
6	G007	WT	G		1030/1130	2	2								X	X												24041008-006			
7	G008	WT	G		851	2	2								X	X												24041008-007			
8	G009	WT	G		842	2	2								X	X												24041008-008			
9	G010	WT	G	4/22/24	1516	2	2								X	X												24041008-009			
10	G011	WT	G	4/22/24	1236	2	2								X	X												24041008-010			
11	G051D	WT	G	4/22/24	1440	2	2								X	X												24041008-011			
12	G052D	WT	G	4/23/24	919	2	2								X	X												24041008-012			
13	G053D	WT	G	4/23/24	1030	2	2								X	X												24041008-013			
14	G054D	WT	G	4/22/24	1404	2	2								X	X												24041008-014			
15	XPW01_pore	WT	G												X													N/A			
16	XPW02_pore	WT	G												X													N/A			
ADDITIONAL COMMENTS				RELINQUISHED BY / AFFILIATION				DATE		TIME		ACCEPTED BY / AFFILIATION				DATE		TIME		SAMPLE CONDITIONS											
JOP-24Q2 Rev 0				Bret Gillman				4/23/24		1526		Mike Reed				4/23/24		1526		Temp in °C: 5 Received on Ice (Y/N): Custody Sealed Cooler (Y/N): Samples Intact (Y/N):											

ph: 96051 on 4/23

Date for sample G052D was
taken from parent sample
on 4/23

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY):

4/23/24

LTG #5

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Page: 2 of 2

[illegible]

Confidential

CHAIN-OF-CUSTODY / Analytical Request Document

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24041008-401

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 1 of 2	
Company: Vistra Corp-Joppa		Report To: Brian Voelker		Attention: Brian Voelker		REGULATORY AGENCY NPDES GROUND WATER DRINKING WATER UST RCRA OTHER Site Location IL STATE:	
Address: 2100 Portland Road		Copy To: Sam Davies: samantha.davies@vistracorp.com		Company Name: Vistra Corp			
Joppa, IL 62953		Roger Faughn - roger.faughn@vistracorp.com		Address: see Section A			
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:			
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:			
Requested Due Date/TAT: 10 day		Project Number: 2285		Profile #:			

ITEM #	Section D Required Client Information	Matrix Codes	MATRIX	COLLECTED	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	Project No./ Lab I.D.
									Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	JOP-257-401	JOP-845-401													
1	G001D	WT	G				2		2							X	X										24041008-001				
2	G002D	WT	G				2		2							X	X										24041008-002				
3	G003	WT	G				2		2							X	X										24041008-003				
4	G005	WT	G				2		2							X	X										24041008-004				
5	G006	WT	G	4/23/24	1517		2		2							X	X										24041008-005				
6	G007	WT	G				2		2							X	X										24041008-006				
7	G008	WT	G				2		2							X	X										24041008-007				
8	G009	WT	G				2		2							X	X										24041008-008				
9	G010	WT	G				2		2							X	X										24041008-009				
10	G011	WT	G				2		2							X	X										24041008-010				
11	G051D	WT	G				2		2							X	X										24041008-011				
12	G052D	WT	G				2		2							X	X										24041008-012				
13	G053D	WT	G				2		2							X	X										24041008-013				
14	G054D	WT	G				2		2							X	X										24041008-014				
15	XPW01_pore	WT	G	4/23/24	1255											X											N/A				
16	XPW02_pore	WT	G	4/23/24	1335											X											N/A				
ADDITIONAL COMMENTS				RELINQUISHED BY / AFFILIATION				DATE		TIME		ACCEPTED BY / AFFILIATION				DATE		TIME		SAMPLE CONDITIONS											
JOP-24Q2 Rev 0				J. C. Plump				4/23		18:33		Paul G. Berg				4/23/24		1837		-52 y z											

PH 9/4/24
Added HNO₃ (7291) to sample 6006
RS 9/124

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Tracy Carroll	SIGNATURE of SAMPLER: Tracy Carroll				
DATE Signed (MM/DD/YY): 4/23/24					

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

24041008
JOP-24Q2-401

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 2 of 2	

Company: Vistra Corp-Joppa		Report To: Brian Voelker		Attention: Brian Voelker		REGULATORY AGENCY					
Address: 2100 Portland Road		Copy To: Sam Davies: samantha.davies@vistracorp.com		Company Name: Vistra Corp							
Joppa, IL 62953		Roger Faughn - roger.faughn@vistracorp.com		Address: see Section A		NPDES		GROUND WATER		DRINKING WATER	
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:		UST		RCRA		OTHER	
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:		Site Location		IL			
Requested Due Date/TAT: 10 day		Project Number: 2285		Profile #:		STATE:					

ITEM #	Section D Required Client Information	Valid Matrix Codes	MATRIX	COLLECTED	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test	Requested Analysis Filtered (Y/N)												Residual Chlorine (Y/N)	Project No./ Lab I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
									Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		JOP-257-401	JOP-845-401																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		</

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	SAMPLE CONDITIONS	
JOP-24Q2 Rev 0		<i>Daniel Crump</i>		4-23	18:33	<i>Paul Batty</i>		4/23/24	18:33	S2, (X), Z	

SAMPLER NAME AND SIGNATURE				Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <i>Tracy Carroll</i>		SIGNATURE of SAMPLER: <i>Tracy Carroll</i>					
DATE Signed (MM/DD/YY): <i>4/23/24</i>							

ANALYTICAL REPORT

PREPARED FOR

Attn: Elizabeth A Hurley
TekLab, Inc
5445 Horseshoe Lake Road
Collinsville, Illinois 62234

Generated 5/29/2024 12:09:35 PM Revision 1

JOB DESCRIPTION

Radium-226 and Radium-228
24041008

JOB NUMBER

160-53883-1

Job Notes

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

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

Authorization



Generated
5/29/2024 12:09:35 PM
Revision 1

Authorized for release by
Erika Jordan, Project Manager
erika.jordan@et.eurofinsus.com
(314)298-8566

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Client: TekLab, Inc
Project: Radium-226 and Radium-228

Job ID: 160-53883-1

Job ID: 160-53883-1

Eurofins St. Louis

CASE NARRATIVE

Client: TekLab, Inc

Project: 24041008

Report Number: 160-53883-1 Revision 1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition, all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method.

Eurofins Environment Testing attests to the validity of the laboratory data generated by Eurofins facilities reported herein. All analyses performed by Eurofins Environment Testing facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins Environment Testing's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

Calculations are performed before rounding to avoid round-off errors in calculated results.

Proper preservation was noted for the methods performed on these samples, unless otherwise detailed below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client.

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

The matrix for the Method Blank and LCS/LCSD is as close to the samples as can be reasonably achieved. Detailed information can be found in the most current revision of the associated SOP.

The method blank (MB) z-score is within limits, unless stated otherwise below.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.

Reference the chain of custody and receipt report for any variations on receipt conditions.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

Revision

The report being provided is a revision of the original report sent on 5/21/2024. The report (revision 1) is being revised in order to correct collection times that were inaccurate on the original chain-of-custody (COC). A revised COC is included with the revised report.

Receipt

The samples were received on 4/25/2024 4:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved. The temperature of the cooler at receipt time was 19.2°C.

Method 903.0 - Radium-226 (GFPC)

Samples 24041008-001 (160-53883-1), 24041008-002 (160-53883-2), 24041008-003 (160-53883-3), 24041008-004 (160-53883-4), 24041008-005 (160-53883-5), 24041008-006 (160-53883-6), 24041008-007 (160-53883-7), 24041008-008

Eurofins St. Louis

Client: TekLab, Inc
Project: Radium-226 and Radium-228

Job ID: 160-53883-1

Job ID: 160-53883-1 (Continued)

Eurofins St. Louis

(160-53883-8), 24041008-009 (160-53883-9), 24041008-010 (160-53883-10), 24041008-011 (160-53883-11), 24041008-012 (160-53883-12), 24041008-013 (160-53883-13), 24041008-014 (160-53883-14), 24041008-015 (160-53883-15) and 24041008-016 (160-53883-16) were analyzed for Radium-226 (GFPC). The samples were prepared on 4/29/2024 and analyzed on 5/21/2024.

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

Method 904.0 - Radium-228 (GFPC)

Samples 24041008-001 (160-53883-1), 24041008-002 (160-53883-2), 24041008-003 (160-53883-3), 24041008-004 (160-53883-4), 24041008-005 (160-53883-5), 24041008-006 (160-53883-6), 24041008-007 (160-53883-7), 24041008-008 (160-53883-8), 24041008-009 (160-53883-9), 24041008-010 (160-53883-10), 24041008-011 (160-53883-11), 24041008-012 (160-53883-12), 24041008-013 (160-53883-13), 24041008-014 (160-53883-14), 24041008-015 (160-53883-15) and 24041008-016 (160-53883-16) were analyzed for Radium-228 (GFPC). The samples were prepared on 4/29/2024 and analyzed on 5/20/2024.

The detection goal was not met for the following samples due to the reduced sample volume attributed to the presence of matrix interferences: 24041008-006 (160-53883-6) and 24041008-011 (160-53883-11) . Analytical results are reported with the detection limit achieved.

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

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

Samples 24041008-001 (160-53883-1), 24041008-002 (160-53883-2), 24041008-003 (160-53883-3), 24041008-004 (160-53883-4), 24041008-005 (160-53883-5), 24041008-006 (160-53883-6), 24041008-007 (160-53883-7), 24041008-008 (160-53883-8), 24041008-009 (160-53883-9), 24041008-010 (160-53883-10), 24041008-011 (160-53883-11), 24041008-012 (160-53883-12), 24041008-013 (160-53883-13), 24041008-014 (160-53883-14), 24041008-015 (160-53883-15) and 24041008-016 (160-53883-16) were analyzed for Combined Radium-226 and Radium-228. The samples were analyzed on 5/21/2024.

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

Eurofins St. Louis

TEKLAB, INC. Chain of Custody

5445 Horseshoe Lake Road, Collinsville, IL 62234 Phone (618) 344-1004 Fax (618) 344-1005

Are the samples chilled? YES ☐ NO ☒ With: ☐ Ice ☐ Blue Ice ☐ Preserved in: ☐ Lab ☐ Field

Teklab Inc

5445 Horseshoe Lake Road
Collinsville, IL 62234

Cooler Temp:

Sampler:

QC Level:

Comments: **Please issue reports and invoices via email only**

Please analyze for Radium 226/228 per your usual methods.

Project# 24041008

Any changes to analysis/methods must be approved by Teklab, Inc. Batch QC is required.

Samples collected from an IL site.

Contact: Elizabeth Hurley

Email: EHurley@TekLabInc.com

Requested Due Date: Standard TAT

Billing/PO: 36179

Phone: (618) 344-1004 ext. 33

Collection times corrected
per field file/s. EAH 5/29/24

PLEASE NOTE:

NELAP accreditation is required on the requested analytes and must be documented as such on the final report. If your laboratory does not currently hold a NELAP accreditation for the requested method and/or analytes, please contact Teklab immediately. If your laboratory loses accreditation or is suspended for any analyte/method during the life of the contract, you must contact Teklab immediately.

Radium 226/228

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix	
	24041008-001	4/22/2024 10:59	HNO3	Groundwater	Collected at 1201.*
	24041008-002	4/22/2024 12:19	HNO3	Groundwater	Collected at 1259.*
	24041008-003	4/22/2024 13:13	HNO3	Groundwater	Collected at 1426.*
	24041008-004	4/23/2024 11:24	HNO3	Groundwater	Collected at 1118.*
	24041008-005	4/23/2024 15:17	HNO3	Groundwater	
	24041008-006	4/23/2024 11:30	HNO3	Groundwater	
	24041008-007	4/23/2024 09:51	HNO3	Groundwater	
	24041008-008	4/23/2024 08:42	HNO3	Groundwater	
	24041008-009	4/22/2024 15:16	HNO3	Groundwater	
	24041008-010	4/22/2024 12:36	HNO3	Groundwater	
	24041008-011	4/22/2024 14:40	HNO3	Groundwater	Collected at 1502. EAH 5/29/24*

*Relinquished By	Date/Time	Received By	Date/Time
<i>Paul B. [Signature]</i>	4/24/24		

Teklab, Inc. protects clients' confidential information as directed by local, state or federal laws. (Teklab QAM Section 9.1, TNI V1 M2, Section 4.1.5 c)

Login Sample Receipt Checklist

Client: TekLab, Inc

Job Number: 160-53883-1

SDG Number: 24041008

Login Number: 53883

List Number: 1

Creator: Worthington, Sierra M

List Source: Eurofins St. Louis

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

Definitions/Glossary

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53883-1
Job Date: 4/1/2024
SDG: 24041008

Qualifiers

Rad

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53883-1
SDG: 24041008

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

Protocol References:

EPA = US Environmental Protection Agency
None = None
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53883-1
SDG: 24041008

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-53883-1	24041008-001	Water	04/22/24 12:01	04/25/24 16:00
160-53883-2	24041008-002	Water	04/22/24 12:59	04/25/24 16:00
160-53883-3	24041008-003	Water	04/22/24 14:26	04/25/24 16:00
160-53883-4	24041008-004	Water	04/23/24 11:18	04/25/24 16:00
160-53883-5	24041008-005	Water	04/23/24 15:17	04/25/24 16:00
160-53883-6	24041008-006	Water	04/23/24 11:30	04/25/24 16:00
160-53883-7	24041008-007	Water	04/23/24 09:51	04/25/24 16:00
160-53883-8	24041008-008	Water	04/23/24 08:42	04/25/24 16:00
160-53883-9	24041008-009	Water	04/22/24 15:16	04/25/24 16:00
160-53883-10	24041008-010	Water	04/22/24 12:36	04/25/24 16:00
160-53883-11	24041008-011	Water	04/22/24 15:02	04/25/24 16:00
160-53883-12	24041008-012	Water	04/23/24 09:19	04/25/24 16:00
160-53883-13	24041008-013	Water	04/23/24 10:30	04/25/24 16:00
160-53883-14	24041008-014	Water	04/22/24 14:04	04/25/24 16:00
160-53883-15	24041008-015	Water	04/23/24 12:30	04/25/24 16:00
160-53883-16	24041008-016	Water	04/23/24 09:19	04/25/24 16:00

Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53883-1
SDG: 24041008

Client Sample ID: 24041008-001

Lab Sample ID: 160-53883-1

Date Collected: 04/22/24 12:01

Matrix: Water

Date Received: 04/25/24 16:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.651		0.393	0.397	1.00	0.538	pCi/L	04/29/24 08:38	05/21/24 07:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.3		30 - 110					04/29/24 08:38	05/21/24 07:41	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.39		0.705	0.717	1.00	0.981	pCi/L	04/29/24 08:42	05/20/24 12:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.3		30 - 110					04/29/24 08:42	05/20/24 12:32	1
Y Carrier	79.3		30 - 110					04/29/24 08:42	05/20/24 12:32	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	2.04		0.807	0.820	5.00	0.981	pCi/L		05/21/24 08:59	1

Client Sample ID: 24041008-002

Lab Sample ID: 160-53883-2

Date Collected: 04/22/24 12:59

Matrix: Water

Date Received: 04/25/24 16:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.307		0.190	0.192	1.00	0.251	pCi/L	04/29/24 08:38	05/21/24 07:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		30 - 110					04/29/24 08:38	05/21/24 07:35	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.507	U	0.359	0.362	1.00	0.544	pCi/L	04/29/24 08:42	05/20/24 12:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		30 - 110					04/29/24 08:42	05/20/24 12:33	1
Y Carrier	83.0		30 - 110					04/29/24 08:42	05/20/24 12:33	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.813		0.406	0.410	5.00	0.544	pCi/L		05/21/24 08:59	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53883-1
SDG: 24041008

Client Sample ID: 24041008-003

Lab Sample ID: 160-53883-3

Date Collected: 04/22/24 14:26

Matrix: Water

Date Received: 04/25/24 16:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.309	U	0.256	0.258	1.00	0.376	pCi/L	04/29/24 08:38	05/21/24 07:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.4		30 - 110					04/29/24 08:38	05/21/24 07:35	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.35		0.629	0.641	1.00	0.833	pCi/L	04/29/24 08:42	05/20/24 12:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.4		30 - 110					04/29/24 08:42	05/20/24 12:33	1
Y Carrier	81.5		30 - 110					04/29/24 08:42	05/20/24 12:33	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.66		0.679	0.691	5.00	0.833	pCi/L		05/21/24 08:59	1

Client Sample ID: 24041008-004

Lab Sample ID: 160-53883-4

Date Collected: 04/23/24 11:18

Matrix: Water

Date Received: 04/25/24 16:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.549		0.308	0.312	1.00	0.403	pCi/L	04/29/24 08:38	05/21/24 07:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		30 - 110					04/29/24 08:38	05/21/24 07:36	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.41		0.529	0.545	1.00	0.635	pCi/L	04/29/24 08:42	05/20/24 12:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		30 - 110					04/29/24 08:42	05/20/24 12:33	1
Y Carrier	86.7		30 - 110					04/29/24 08:42	05/20/24 12:33	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.96		0.612	0.628	5.00	0.635	pCi/L		05/21/24 08:59	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53883-1
SDG: 24041008

Client Sample ID: 24041008-005

Lab Sample ID: 160-53883-5

Date Collected: 04/23/24 15:17

Matrix: Water

Date Received: 04/25/24 16:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.781		0.367	0.373	1.00	0.432	pCi/L	04/29/24 08:38	05/21/24 07:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.6		30 - 110					04/29/24 08:38	05/21/24 07:36	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.942		0.611	0.617	1.00	0.903	pCi/L	04/29/24 08:42	05/20/24 12:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.6		30 - 110					04/29/24 08:42	05/20/24 12:33	1
Y Carrier	81.9		30 - 110					04/29/24 08:42	05/20/24 12:33	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.72		0.713	0.721	5.00	0.903	pCi/L		05/21/24 08:59	1

Client Sample ID: 24041008-006

Lab Sample ID: 160-53883-6

Date Collected: 04/23/24 11:30

Matrix: Water

Date Received: 04/25/24 16:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.784		0.404	0.410	1.00	0.483	pCi/L	04/29/24 08:38	05/21/24 07:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		30 - 110					04/29/24 08:38	05/21/24 07:36	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.88	G	0.871	0.888	1.00	1.19	pCi/L	04/29/24 08:42	05/20/24 12:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		30 - 110					04/29/24 08:42	05/20/24 12:33	1
Y Carrier	81.9		30 - 110					04/29/24 08:42	05/20/24 12:33	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	2.66		0.960	0.978	5.00	1.19	pCi/L		05/21/24 08:59	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53883-1
SDG: 24041008

Client Sample ID: 24041008-007

Lab Sample ID: 160-53883-7

Date Collected: 04/23/24 09:51

Matrix: Water

Date Received: 04/25/24 16:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.214	U	0.216	0.216	1.00	0.336	pCi/L	04/29/24 08:38	05/21/24 09:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.6		30 - 110					04/29/24 08:38	05/21/24 09:29	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.44		0.571	0.586	1.00	0.714	pCi/L	04/29/24 08:42	05/20/24 12:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.6		30 - 110					04/29/24 08:42	05/20/24 12:33	1
Y Carrier	79.3		30 - 110					04/29/24 08:42	05/20/24 12:33	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.66		0.610	0.625	5.00	0.714	pCi/L		05/21/24 08:59	1

Client Sample ID: 24041008-008

Lab Sample ID: 160-53883-8

Date Collected: 04/23/24 08:42

Matrix: Water

Date Received: 04/25/24 16:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.161	U	0.228	0.228	1.00	0.386	pCi/L	04/29/24 08:38	05/21/24 09:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.2		30 - 110					04/29/24 08:38	05/21/24 09:29	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.786	U	0.538	0.542	1.00	0.797	pCi/L	04/29/24 08:42	05/20/24 12:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.2		30 - 110					04/29/24 08:42	05/20/24 12:33	1
Y Carrier	80.4		30 - 110					04/29/24 08:42	05/20/24 12:33	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.948		0.584	0.588	5.00	0.797	pCi/L		05/21/24 08:59	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53883-1
SDG: 24041008

Client Sample ID: 24041008-009

Lab Sample ID: 160-53883-9

Date Collected: 04/22/24 15:16

Matrix: Water

Date Received: 04/25/24 16:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.117	U	0.230	0.231	1.00	0.409	pCi/L	04/29/24 08:38	05/21/24 09:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		30 - 110					04/29/24 08:38	05/21/24 09:29	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.33		0.556	0.570	1.00	0.712	pCi/L	04/29/24 08:42	05/20/24 12:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		30 - 110					04/29/24 08:42	05/20/24 12:34	1
Y Carrier	83.7		30 - 110					04/29/24 08:42	05/20/24 12:34	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.45		0.602	0.615	5.00	0.712	pCi/L		05/21/24 08:59	1

Client Sample ID: 24041008-010

Lab Sample ID: 160-53883-10

Date Collected: 04/22/24 12:36

Matrix: Water

Date Received: 04/25/24 16:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.118	U	0.184	0.184	1.00	0.316	pCi/L	04/29/24 08:38	05/21/24 09:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.7		30 - 110					04/29/24 08:38	05/21/24 09:29	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.675	U	0.463	0.467	1.00	0.702	pCi/L	04/29/24 08:42	05/20/24 12:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.7		30 - 110					04/29/24 08:42	05/20/24 12:34	1
Y Carrier	80.0		30 - 110					04/29/24 08:42	05/20/24 12:34	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.793		0.498	0.502	5.00	0.702	pCi/L		05/21/24 15:41	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53883-1
SDG: 24041008

Client Sample ID: 24041008-011

Lab Sample ID: 160-53883-11

Date Collected: 04/22/24 15:02

Matrix: Water

Date Received: 04/25/24 16:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0996	U	0.285	0.285	1.00	0.528	pCi/L	04/29/24 08:38	05/21/24 09:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	60.2		30 - 110					04/29/24 08:38	05/21/24 09:29	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.25	G	0.745	0.753	1.00	1.07	pCi/L	04/29/24 08:42	05/20/24 12:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	60.2		30 - 110					04/29/24 08:42	05/20/24 12:34	1
Y Carrier	81.5		30 - 110					04/29/24 08:42	05/20/24 12:34	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.35		0.798	0.805	5.00	1.07	pCi/L		05/21/24 15:41	1

Client Sample ID: 24041008-012

Lab Sample ID: 160-53883-12

Date Collected: 04/23/24 09:19

Matrix: Water

Date Received: 04/25/24 16:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.524		0.236	0.240	1.00	0.256	pCi/L	04/29/24 08:38	05/21/24 09:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.7		30 - 110					04/29/24 08:38	05/21/24 09:29	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.644	U	0.437	0.441	1.00	0.657	pCi/L	04/29/24 08:42	05/20/24 12:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.7		30 - 110					04/29/24 08:42	05/20/24 12:34	1
Y Carrier	80.7		30 - 110					04/29/24 08:42	05/20/24 12:34	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.17		0.497	0.502	5.00	0.657	pCi/L		05/21/24 15:41	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53883-1
SDG: 24041008

Client Sample ID: 24041008-013

Lab Sample ID: 160-53883-13

Date Collected: 04/23/24 10:30

Matrix: Water

Date Received: 04/25/24 16:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.136	U	0.220	0.221	1.00	0.385	pCi/L	04/29/24 08:38	05/21/24 09:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	69.5		30 - 110					04/29/24 08:38	05/21/24 09:29	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.182	U	0.495	0.496	1.00	0.880	pCi/L	04/29/24 08:42	05/20/24 12:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	69.5		30 - 110					04/29/24 08:42	05/20/24 12:34	1
Y Carrier	86.0		30 - 110					04/29/24 08:42	05/20/24 12:34	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.318	U	0.542	0.543	5.00	0.880	pCi/L		05/21/24 15:41	1

Client Sample ID: 24041008-014

Lab Sample ID: 160-53883-14

Date Collected: 04/22/24 14:04

Matrix: Water

Date Received: 04/25/24 16:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.111	U	0.139	0.140	1.00	0.230	pCi/L	04/29/24 08:38	05/21/24 09:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.0		30 - 110					04/29/24 08:38	05/21/24 09:29	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.316	U	0.387	0.388	1.00	0.641	pCi/L	04/29/24 08:42	05/20/24 12:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.0		30 - 110					04/29/24 08:42	05/20/24 12:35	1
Y Carrier	81.9		30 - 110					04/29/24 08:42	05/20/24 12:35	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.427	U	0.411	0.412	5.00	0.641	pCi/L		05/21/24 15:41	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53883-1
SDG: 24041008

Client Sample ID: 24041008-015

Lab Sample ID: 160-53883-15

Date Collected: 04/23/24 12:30

Matrix: Water

Date Received: 04/25/24 16:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0167	U	0.116	0.116	1.00	0.237	pCi/L	04/29/24 08:38	05/21/24 09:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		30 - 110					04/29/24 08:38	05/21/24 09:29	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.296	U	0.356	0.357	1.00	0.587	pCi/L	04/29/24 08:42	05/20/24 12:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		30 - 110					04/29/24 08:42	05/20/24 12:35	1
Y Carrier	80.7		30 - 110					04/29/24 08:42	05/20/24 12:35	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.313	U	0.374	0.375	5.00	0.587	pCi/L		05/21/24 15:41	1

Client Sample ID: 24041008-016

Lab Sample ID: 160-53883-16

Date Collected: 04/23/24 09:19

Matrix: Water

Date Received: 04/25/24 16:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.502		0.277	0.281	1.00	0.366	pCi/L	04/29/24 08:38	05/21/24 09:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.9		30 - 110					04/29/24 08:38	05/21/24 09:29	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.778		0.434	0.440	1.00	0.616	pCi/L	04/29/24 08:42	05/20/24 12:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.9		30 - 110					04/29/24 08:42	05/20/24 12:35	1
Y Carrier	81.5		30 - 110					04/29/24 08:42	05/20/24 12:35	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.28		0.515	0.522	5.00	0.616	pCi/L		05/21/24 15:41	1

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QC Sample Results

APPENDIX A.

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Job ID: 160-53883-1
SDG: 24041008

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-659066/1-A
Matrix: Water
Analysis Batch: 662737

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 659066

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.01164	U	0.163	0.163	1.00	0.331	pCi/L	04/29/24 08:38	05/21/24 07:41	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		30 - 110					04/29/24 08:38	05/21/24 07:41	1

Lab Sample ID: LCS 160-659066/2-A
Matrix: Water
Analysis Batch: 662737

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 659066

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	10.89		1.31	1.00	0.229	pCi/L	96	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	92.1		30 - 110						

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-659067/1-A
Matrix: Water
Analysis Batch: 662409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 659067

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.9131		0.395	0.404	1.00	0.519	pCi/L	04/29/24 08:42	05/20/24 12:32	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		30 - 110					04/29/24 08:42	05/20/24 12:32	1
Y Carrier	83.7		30 - 110					04/29/24 08:42	05/20/24 12:32	1

Lab Sample ID: LCS 160-659067/2-A
Matrix: Water
Analysis Batch: 662409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 659067

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	8.93	11.09		1.45	1.00	0.570	pCi/L	124	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	92.1		30 - 110						
Y Carrier	85.2		30 - 110						

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QC Association Summary

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
LOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53883-1
SDG: 24041008

Rad

Prep Batch: 659066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-53883-1	24041008-001	Total/NA	Water	PrecSep-21	
160-53883-2	24041008-002	Total/NA	Water	PrecSep-21	
160-53883-3	24041008-003	Total/NA	Water	PrecSep-21	
160-53883-4	24041008-004	Total/NA	Water	PrecSep-21	
160-53883-5	24041008-005	Total/NA	Water	PrecSep-21	
160-53883-6	24041008-006	Total/NA	Water	PrecSep-21	
160-53883-7	24041008-007	Total/NA	Water	PrecSep-21	
160-53883-8	24041008-008	Total/NA	Water	PrecSep-21	
160-53883-9	24041008-009	Total/NA	Water	PrecSep-21	
160-53883-10	24041008-010	Total/NA	Water	PrecSep-21	
160-53883-11	24041008-011	Total/NA	Water	PrecSep-21	
160-53883-12	24041008-012	Total/NA	Water	PrecSep-21	
160-53883-13	24041008-013	Total/NA	Water	PrecSep-21	
160-53883-14	24041008-014	Total/NA	Water	PrecSep-21	
160-53883-15	24041008-015	Total/NA	Water	PrecSep-21	
160-53883-16	24041008-016	Total/NA	Water	PrecSep-21	
MB 160-659066/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-659066/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 659067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-53883-1	24041008-001	Total/NA	Water	PrecSep_0	
160-53883-2	24041008-002	Total/NA	Water	PrecSep_0	
160-53883-3	24041008-003	Total/NA	Water	PrecSep_0	
160-53883-4	24041008-004	Total/NA	Water	PrecSep_0	
160-53883-5	24041008-005	Total/NA	Water	PrecSep_0	
160-53883-6	24041008-006	Total/NA	Water	PrecSep_0	
160-53883-7	24041008-007	Total/NA	Water	PrecSep_0	
160-53883-8	24041008-008	Total/NA	Water	PrecSep_0	
160-53883-9	24041008-009	Total/NA	Water	PrecSep_0	
160-53883-10	24041008-010	Total/NA	Water	PrecSep_0	
160-53883-11	24041008-011	Total/NA	Water	PrecSep_0	
160-53883-12	24041008-012	Total/NA	Water	PrecSep_0	
160-53883-13	24041008-013	Total/NA	Water	PrecSep_0	
160-53883-14	24041008-014	Total/NA	Water	PrecSep_0	
160-53883-15	24041008-015	Total/NA	Water	PrecSep_0	
160-53883-16	24041008-016	Total/NA	Water	PrecSep_0	
MB 160-659067/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-659067/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Tracer/Carrier Summary

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-53883-1
SDG: 24041008

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)
160-53883-1	24041008-001	71.3
160-53883-2	24041008-002	91.4
160-53883-3	24041008-003	73.4
160-53883-4	24041008-004	85.0
160-53883-5	24041008-005	71.6
160-53883-6	24041008-006	84.0
160-53883-7	24041008-007	88.6
160-53883-8	24041008-008	80.2
160-53883-9	24041008-009	87.3
160-53883-10	24041008-010	82.7
160-53883-11	24041008-011	60.2
160-53883-12	24041008-012	79.7
160-53883-13	24041008-013	69.5
160-53883-14	24041008-014	83.0
160-53883-15	24041008-015	85.8
160-53883-16	24041008-016	78.9
LCS 160-659066/2-A	Lab Control Sample	92.1
MB 160-659066/1-A	Method Blank	91.9

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
160-53883-1	24041008-001	71.3	79.3
160-53883-2	24041008-002	91.4	83.0
160-53883-3	24041008-003	73.4	81.5
160-53883-4	24041008-004	85.0	86.7
160-53883-5	24041008-005	71.6	81.9
160-53883-6	24041008-006	84.0	81.9
160-53883-7	24041008-007	88.6	79.3
160-53883-8	24041008-008	80.2	80.4
160-53883-9	24041008-009	87.3	83.7
160-53883-10	24041008-010	82.7	80.0
160-53883-11	24041008-011	60.2	81.5
160-53883-12	24041008-012	79.7	80.7
160-53883-13	24041008-013	69.5	86.0
160-53883-14	24041008-014	83.0	81.9
160-53883-15	24041008-015	85.8	80.7
160-53883-16	24041008-016	78.9	81.5
LCS 160-659067/2-A	Lab Control Sample	92.1	85.2
MB 160-659067/1-A	Method Blank	91.9	83.7

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

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Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Summary

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

WO Sample	Well ID	Program/ Sample Type	Weather				Well Condition				
			Temp (°F)	Precipitation	Wind Direction	Sky	Well Pad	Casing	Protective Cover	Reference Mark/ ID	Well Locked
001	G001D	Groundwater Sample	58.0	None	NE	Clear	Good	Good	Good	Yes	Yes
002	G002D	Groundwater Sample	62.0	None	NE	Clear	Good	Good	Good	Yes	Yes
003	G003	Groundwater Sample	64.0	None	NE	Clear	Good	Good	Good	Yes	Yes
004	G005	Groundwater Sample	72.0	None	NE	Clear	Good	Good	Good	Yes	Yes
005	G006	Groundwater Sample	72.0	None	NE	Clear	Good	Good	Good	Yes	Yes
006	G007	Groundwater Sample	64.0	None	S	Partly cloudy	Good	Good	Good	Yes	Yes
007	G008	Groundwater Sample	56.0	None	NE	Clear	Good	Good	Good	Yes	Yes
008	G009	Groundwater Sample	53.0	None	NE	Clear	Good	Good	Good	Yes	Yes
009	G010	Groundwater Sample	65.0	None	NE	Clear	Good	Good	Good	Yes	Yes
010	G011	Groundwater Sample	65.0	None	NE	Clear	Good	Good	Good	Yes	Yes
011	G051D	Groundwater Sample	66.0	None	NE	Clear	Good	Good	Good	Yes	Yes
012	G052D	Groundwater Sample	68.0	None	NE	Clear	Good	Good	Good	Yes	Yes
013	G053D	Groundwater Sample	68.0	None	NE	Clear	Good	Good	Good	Yes	Yes
014	G054D	Groundwater Sample	65.0	None	NE	Clear	Good	Good	Good	Yes	Yes
015	XPW01_pore	Groundwater Sample	72.0	None	NE	Clear	Good	Good	Good	Yes	Yes
016	XPW02_pore	Groundwater Sample	72.0	None	NE	Clear	Good	Good	Good	Yes	Yes
017	XPW03_pore	Groundwater Sample	72.0	None	NE	Clear	Good	Good	Good	Yes	Yes
018	XSG01	DTW Only	65.0	None	NE	Clear					
019	YSG03	DTW Only	65.0	None	NE	Clear					
020	Field Blank	QA/QC Sample	72.0	None	NE	Clear					
021	G052D Duplicate	QA/QC Sample	68.0	None	NE	Clear	Good	Good	Good	Yes	Yes

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Summary

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

WO Sample	Well ID	GW Level Measurement				Purge Activities							
		Sampler Initials	Date/Time	DTW (ft)	DTB (ft)	Sampler Initials	Purge Date	Purge Start Time	Purge End Time	Purging Device	Well Diameter (in)	Actual Volume Purged (L)	Purge Rate (mL/min)
001	G001D	BG	4/22/24 10:59	41.86	67.10	BG	4/22/2024	10:59	12:01	Bladder Pump	2"	8.5	137.1
002	G002D	BG	4/22/24 12:19	42.32	75.20	BG	4/22/2024	12:19	12:59	Bladder Pump	2"	5.5	137.5
003	G003	BG	4/22/24 13:13	37.45	68.03	BG	4/22/2024	13:13	14:26	Bladder Pump	2"	6.0	82.2
004	G005	DC	4/23/24 10:50	43.20	62.92	DC	4/23/2024	10:51	11:24	Bladder Pump	2"	9.0	272.7
005	G006	DC	4/23/24 14:18	37.32	62.76	DC	4/23/2024	14:19	15:17	Bladder Pump	2"	11.0	189.7
006	G007	JC	4/23/24 10:38	37.17	87.64	JC	4/23/2024	10:38	11:39	Bladder Pump	2"	7.0	114.8
007	G008	BG	4/23/24 9:04	27.05	86.82	BG	4/23/2024	09:04	09:51	Bladder Pump	2"	6.0	127.7
008	G009	BG	4/23/24 8:16	35.69	72.51	BG	4/23/2024	08:16	08:42	Bladder Pump	2"	3.0	115.4
009	G010	TAC	4/22/24 14:31	35.49	73.04	TAC	4/22/2024	14:32	15:16	Bladder Pump	2"	12.0	272.7
010	G011	TAC	4/22/24 11:41	45.41	68.90	TAC	4/22/2024	11:46	12:36	Bladder Pump	2"	10.0	200.0
011	G051D	BG	4/22/24 14:40	42.42	62.70	BG	4/22/2024	14:40	15:02	Bladder Pump	2"	6.0	272.7
012	G052D	DC	4/23/24 8:50	27.20	82.50	DC	4/23/2024	08:54	09:19	Bladder Pump	2"	7.0	280.0
013	G053D	TAC	4/23/24 9:58	36.03	60.60	DC	4/23/2024	10:00	10:30	Bladder Pump	2"	9.0	300.0
014	G054D	TAC	4/22/24 13:26	37.91	83.50	TAC	4/22/2024	13:30	14:04	Bladder Pump	2"	8.0	235.3
015	XPW01_pore	DC	4/23/24 12:32	14.68	56.31	DC	4/23/2024	12:33	12:55	Bladder Pump	2"	2.0	90.9
016	XPW02_pore	DC	4/23/24 13:13	4.55	32.52	DC	4/23/2024	13:14	13:35	Bladder Pump	2"	6.0	285.7
017	XPW03_pore	DC	4/23/24 11:41	14.46	39.57	DC	4/23/2024	11:43	12:20	Bladder Pump	2"	3.0	81.1
018	XSG01	JC	4/22/24 11:09	N/A	-								
019	YSG03	JC	4/22/24 13:17	38.25	-								
020	Field Blank	-	-	-	-								
021	G052D Duplicate	DC	4/23/24 8:50	27.20	82.50	DC	4/23/2024	08:54	09:19	Bladder Pump	2"	7.0	280.0

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Summary

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

WO Sample	Well ID	Sampling Activities and Observations										
		Sampler Initials	Date	Time	Sampling Method	Instrument ID	Field Filtered	Appearance	Odor	Color	Post-Sample DTW (ft)	Drawdown (ft)
001	G001D	BG	04/22/24	12:01	Low Flow	26599	No	Clear	None	Lt Brown	42.59	0.73
002	G002D	BG	04/22/24	12:59	Low Flow	26599	No	Clear	None	clear	42.41	0.09
003	G003	BG	04/22/24	14:26	Low Flow	26599	No	Clear	None	Lt Brown	37.41	-0.04
004	G005	TAC	04/23/24	11:24	Low Flow	218083	No	Clear	None	None	45.46	2.26
005	G006	TAC	04/23/24	15:17	Low Flow	218083	No	Clear	None	None	37.70	0.38
006	G007	JC	04/23/24	11:30	Low Flow	26599	No	Slightly cloudy	None	Lt Brown	37.17	0
007	G008	BG	04/22/24	09:51	Low Flow	26599	No	Clear	None	Clear	27.05	0
008	G009	BG	04/22/24	08:42	Low Flow	26599	No	Clear	None	Lt Brown	34.85	-0.84
009	G010	TAC	04/22/24	15:16	Low Flow	218083	No	Clear	None	Rust	35.75	0.26
010	G011	TAC	04/22/24	12:36	Low Flow	218083	No	Clear	None	None	45.42	0.01
011	G051D	BG	04/22/24	15:02	Low Flow	26599	No	Clear	None	CLEAR	43.13	0.71
012	G052D	TAC	04/23/24	09:19	Low Flow	218083	No	Clear	None	None	29.25	2.05
013	G053D	TAC	04/23/24	10:30	Low Flow	218083	No	Clear	None	None	36.19	0.16
014	G054D	TAC	04/22/24	14:04	Low Flow	218083	No	Clear	None	None	37.95	0.04
015	XPW01_pore	TAC	04/23/24	12:55	Low Flow	218083	No	Clear	None	None	15.59	0.91
016	XPW02_pore	TAC	04/23/24	13:35	Low Flow	218083	No	Clear	None	None	4.80	0.25
017	XPW03_pore	TAC	04/23/24	12:20	Low Flow	218083	No	Clear	None	None	18.66	4.2
018	XSG01											
019	YSG03											
020	Field Blank	TAC	04/23/24	12:30	No Purge	-	No					
021	G052D Duplicate	TAC	04/23/24	09:19	Low Flow	218083	No	Clear	None	None	29.25	2.05

Site Sampling Event: Joppa- 2Q 2024

LIMS Workorder: 24041007

Technician(s): DC, JC, TC, BG, PY

Groundwater Sampling Summary

Joppa- 2Q 2024

WO Sample	Well ID	COMMENTS
001	G001D	
002	G002D	
003	G003	
004	G005	
005	G006	
006	G007	
007	G008	
008	G009	
009	G010	
010	G011	
011	G051D	
012	G052D	
013	G053D	
014	G054D	
015	XPW01_pore	
016	XPW02_pore	
017	XPW03_pore	
018	XSG01	
019	YSG03	
020	Field Blank	
021	G052D Duplicate	

Site Sampling Event: Joppa- 2Q 2024

Stabilized Field Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	LIMS ID
G001D	4/22/2024	12:01	17.3	63.1	6.32	567.8	1.75	223.65	131.1	41.86	24041007-001A
G002D	4/22/2024	12:59	14.8	58.6	6.25	405.7	2.91	0.18	162.4	42.32	24041007-002A
G003	4/22/2024	14:26	19.9	67.9	6.24	504.9	3.46	85.05	170.2	37.45	24041007-003A
G005	4/23/2024	11:18	16.9	62.4	6.38	526.2	1.70	38.52	25.9	43.20	24041007-004A
G006	4/23/2024	15:17	16.1	61.0	6.59	692.9	0.32	76.90	84.2	37.32	24041007-005A
G007	4/23/2024	11:30	17.3	63.1	6.39	894.7	1.07	88.28	138.3	37.17	24041007-006A
G008	4/23/2024	9:51	17.4	63.3	6.89	886.1	1.34	27.38	-8.4	27.05	24041007-007A
G009	4/23/2024	8:42	17.0	62.6	6.11	747.1	1.16	74.42	-3.7	35.69	24041007-008A
G010	4/22/2024	15:16	17.1	62.8	6.60	1,214.1	0.31	69.69	34.7	35.49	24041007-009A
G011	4/22/2024	12:36	17.1	62.8	6.16	631.7	1.65	20.02	111.6	45.41	24041007-010A
G051D	4/22/2024	15:02	17.1	62.8	5.40	403.2	3.37	39.48	223.9	42.42	24041007-011A
G052D	4/23/2024	9:19	15.2	59.4	6.37	400.5	0.50	2.66	-110.5	27.20	24041007-012A
G053D	4/23/2024	10:30	16.5	61.7	6.39	470.3	0.16	36.77	25.8	36.03	24041007-013A
G054D	4/22/2024	14:04	16.6	61.9	6.61	835.1	0.13	10.17	-4.9	37.91	24041007-014A
XPW01_pore	4/23/2024	12:55	19.8	67.6	8.48	942.2	0.29	3.56	-196.0	14.68	24041007-015A
XPW02_pore	4/23/2024	13:35	18.1	64.6	7.68	4,805.9	0.61	4.58	-177.4	4.55	24041007-016A
XPW03_pore	4/23/2024	12:20	20.7	69.3	10.65	641.3	1.66	1.74	-112.4	14.46	24041007-017A
XSG01	4/22/2024	11:09	DTW Only							N/A	24041007-018A
YSG03	4/22/2024	13:17	DTW Only							38.25	24041007-019A
Field Blank	4/23/2024	12:30	QA/QC Sample							-	24041007-020A
G052D Duplicate	4/23/2024	9:19	15.2	59.4	6.37	400.5	0.50	2.66	-110.5	27.20	24041007-021A

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G001D	4/22/2024	11:13	41.86	16.5	61.7	6.44	521.9	1.61	19.59	114.1
G001D	4/22/2024	11:16	41.86	16.5	61.8	6.44	523.7	1.36	17.32	115.0
G001D	4/22/2024	11:19	41.86	16.5	61.6	6.43	524.1	1.31	19.19	116.4
G001D	4/22/2024	11:22	41.86	16.6	61.8	6.43	523.4	1.26	23.96	117.4
G001D	4/22/2024	11:25	41.86	16.5	61.7	6.43	522.1	1.19	27.31	118.0
G001D	4/22/2024	11:28	41.86	17.1	62.8	6.64	4.7	6.99	17.29	117.3
G001D	4/22/2024	11:31	41.86	16.3	61.3	6.42	529.6	3.04	367.73	126.6
G001D	4/22/2024	11:34	41.86	16.8	62.2	6.41	539.8	2.87	382.14	122.8
G001D	4/22/2024	11:37	41.86	16.3	61.4	6.41	545.5	2.35	473.40	117.3
G001D	4/22/2024	11:40	41.86	16.4	61.5	6.35	555.3	1.38	273.69	115.7
G001D	4/22/2024	11:43	41.86	16.7	62.1	6.33	563.6	1.38	276.16	119.0
G001D	4/22/2024	11:46	41.86	16.7	62.0	6.35	560.4	1.44	271.66	119.7
G001D	4/22/2024	11:49	41.86	16.7	62.1	6.33	563.3	1.49	266.11	122.4
G001D	4/22/2024	11:52	41.86	16.7	62.1	6.32	566.9	1.57	259.22	125.6
G001D	4/22/2024	11:55	41.86	16.7	62.1	6.31	567.6	1.66	219.87	128.3
G001D	4/22/2024	11:58	41.86	16.8	62.3	6.31	568.1	1.72	221.86	130.8
G001D	4/22/2024	12:01	41.86	17.3	63.1	6.32	567.8	1.75	223.65	131.1

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G002D	4/22/2024	12:23	42.32	15.1	59.2	6.64	406.9	5.61	2.96	157.0
G002D	4/22/2024	12:26	42.32	14.9	58.9	6.49	408.7	3.51	2.24	157.5
G002D	4/22/2024	12:29	42.32	14.9	58.8	6.43	408.4	3.13	2.27	156.7
G002D	4/22/2024	12:32	42.32	14.9	58.8	6.41	408.0	3.07	2.59	156.2
G002D	4/22/2024	12:35	42.32	14.9	58.8	6.38	407.9	2.98	3.26	156.6
G002D	4/22/2024	12:38	42.32	14.8	58.7	6.36	407.8	2.93	4.04	157.4
G002D	4/22/2024	12:41	42.32	14.8	58.6	6.29	407.8	2.87	5.17	158.5
G002D	4/22/2024	12:44	42.32	14.9	58.8	6.28	407.1	2.85	6.12	158.9
G002D	4/22/2024	12:47	42.32	14.7	58.4	6.27	406.3	2.83	1.45	159.5
G002D	4/22/2024	12:50	42.32	14.8	58.6	6.27	406.6	2.70	0.60	160.0
G002D	4/22/2024	12:53	42.32	14.8	58.6	6.26	406.5	2.73	0.19	160.7
G002D	4/22/2024	12:56	42.32	14.8	58.7	6.26	406.3	2.79	0.22	161.4
G002D	4/22/2024	12:59	42.32	14.8	58.6	6.25	405.7	2.91	0.18	162.4

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G003	4/22/2024	13:17	37.45	16.7	62.1	6.10	582.7	3.09	53.34	139.6
G003	4/22/2024	13:20	37.45	16.7	62.1	6.08	609.1	2.57	34.90	154.4
G003	4/22/2024	13:23	37.45	16.8	62.3	6.08	618.2	2.32	29.17	160.7
G003	4/22/2024	13:26	37.45	16.8	62.2	6.08	623.9	2.26	21.57	164.5
G003	4/22/2024	13:29	37.45	16.8	62.2	6.07	629.8	2.23	19.59	167.1
G003	4/22/2024	13:32	37.45	16.7	62.1	6.08	626.7	2.24	31.09	168.3
G003	4/22/2024	13:35	37.45	16.2	61.1	6.11	586.9	2.91	128.45	170.0
G003	4/22/2024	13:38	37.45	16.8	62.3	6.11	573.7	2.56	155.46	168.8
G003	4/22/2024	13:41	37.45	17.4	63.4	6.13	563.4	2.62	176.86	167.6
G003	4/22/2024	13:44	37.45	17.5	63.4	6.15	543.0	2.74	202.03	166.6
G003	4/22/2024	13:47	37.45	17.5	63.6	6.19	512.6	2.90	208.66	165.4
G003	4/22/2024	13:50	37.45	17.6	63.7	6.20	497.2	3.05	206.86	165.3
G003	4/22/2024	13:53	37.45	17.6	63.6	6.20	497.2	3.20	205.76	165.6
G003	4/22/2024	13:56	37.45	18.1	64.6	6.20	501.3	4.18	122.90	165.0
G003	4/22/2024	13:59	37.45	17.7	63.8	6.20	504.0	3.70	97.92	166.7
G003	4/22/2024	14:02	37.45	18.1	64.6	6.20	502.6	3.57	101.96	167.6
G003	4/22/2024	14:05	37.45	18.4	65.1	6.20	504.0	3.46	106.74	168.4
G003	4/22/2024	14:08	37.45	18.8	65.8	6.21	503.7	3.42	111.86	168.7
G003	4/22/2024	14:11	37.45	19.1	66.4	6.22	503.7	3.41	118.88	169.4
G003	4/22/2024	14:14	37.45	19.4	66.9	6.22	505.2	3.54	77.40	169.7
G003	4/22/2024	14:17	37.45	19.5	67.1	6.23	505.0	3.50	81.54	169.8
G003	4/22/2024	14:20	37.45	19.7	67.4	6.23	504.8	3.48	84.68	169.9
G003	4/22/2024	14:23	37.45	19.8	67.7	6.24	504.4	3.46	83.76	169.9
G003	4/22/2024	14:26	37.45	19.9	67.9	6.24	504.9	3.46	85.05	170.2

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G005	4/23/2024	11:03	43.2	16.8	62.2	6.40	532.2	1.45	68.51	14.0
G005	4/23/2024	11:06	43.2	16.8	62.2	6.40	531.8	1.48	85.12	16.7
G005	4/23/2024	11:09	43.2	16.8	62.2	6.39	528.2	1.53	102.14	19.4
G005	4/23/2024	11:12	43.2	16.8	62.2	6.38	528.6	1.63	48.44	22.1
G005	4/23/2024	11:15	43.2	16.8	62.2	6.38	527.2	1.71	38.22	24.1
G005	4/23/2024	11:18	43.2	16.9	62.4	6.38	526.2	1.70	38.52	25.9

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G006	4/23/2024	14:56	37.32	16.1	61.0	6.60	691.5	0.44	125.91	77.0
G006	4/23/2024	14:59	37.32	16.1	61.0	6.59	692.1	0.41	106.88	78.3
G006	4/23/2024	15:02	37.32	16.1	61.0	6.59	691.7	0.38	100.11	79.3
G006	4/23/2024	15:05	37.32	16.1	61.0	6.59	691.8	0.36	94.77	80.3
G006	4/23/2024	15:08	37.32	16.1	61.0	6.60	692.2	0.35	85.93	81.1
G006	4/23/2024	15:11	37.32	16.1	61.0	6.59	692.2	0.34	78.79	82.0
G006	4/23/2024	15:14	37.32	16.1	61.0	6.60	692.5	0.33	78.90	83.1
G006	4/23/2024	15:17	37.32	16.1	61.0	6.59	692.9	0.32	76.90	84.2

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G007	4/23/2024	11:24	37.17	17.3	63.1	6.38	891.2	1.11	94.77	137.9
G007	4/23/2024	11:27	37.17	17.3	63.1	6.38	892.7	1.09	91.13	138.1
G007	4/23/2024	11:30	37.17	17.3	63.1	6.39	894.7	1.07	88.28	138.3

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G008	4/23/2024	9:30	27.05	17.1	62.7	6.88	891.4	1.57	86.27	-5.8
G008	4/23/2024	9:33	27.05	17.1	62.7	6.88	887.4	1.51	66.71	-6.2
G008	4/23/2024	9:36	27.05	17.2	63.0	6.88	885.5	1.45	57.70	-6.9
G008	4/23/2024	9:39	27.05	17.3	63.1	6.88	885.9	1.41	48.94	-7.7
G008	4/23/2024	9:42	27.05	17.4	63.3	6.88	885.0	1.39	41.09	-7.9
G008	4/23/2024	9:45	27.05	17.4	63.4	6.89	885.6	1.37	35.31	-8.0
G008	4/23/2024	9:48	27.05	17.4	63.4	6.89	885.8	1.36	29.95	-8.2
G008	4/23/2024	9:51	27.05	17.4	63.3	6.89	886.1	1.34	27.38	-8.4

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G009	4/23/2024	8:33	35.69	16.9	62.4	6.13	746.6	1.51	77.08	-0.8
G009	4/23/2024	8:36	35.69	16.9	62.5	6.12	746.1	1.32	80.85	-3.3
G009	4/23/2024	8:39	35.69	17.0	62.6	6.11	746.2	1.22	78.13	-4.3
G009	4/23/2024	8:42	35.69	17.0	62.6	6.11	747.1	1.16	74.42	-3.7

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G010	4/22/2024	14:55	35.49	16.9	62.4	6.58	1,246.5	0.35	302.10	42.9
G010	4/22/2024	14:58	35.49	17.1	62.8	6.59	1,242.3	0.35	138.75	40.0
G010	4/22/2024	15:01	35.49	17.1	62.8	6.59	1,232.7	0.35	98.84	38.6
G010	4/22/2024	15:04	35.49	17.1	62.8	6.59	1,231.1	0.34	78.01	37.0
G010	4/22/2024	15:07	35.49	17.1	62.8	6.60	1,227.5	0.34	80.67	36.2
G010	4/22/2024	15:10	35.49	17.1	62.8	6.60	1,222.8	0.32	66.54	35.5
G010	4/22/2024	15:13	35.49	17.0	62.6	6.60	1,218.2	0.31	67.91	35.1
G010	4/22/2024	15:16	35.49	17.1	62.8	6.60	1,214.1	0.31	69.69	34.7

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G011	4/22/2024	12:06	45.41	17.1	62.8	6.19	756.6	2.90	15.59	110.3
G011	4/22/2024	12:09	45.41	17.2	63.0	6.18	735.2	2.65	14.82	109.9
G011	4/22/2024	12:12	45.41	17.1	62.8	6.17	715.8	2.44	16.38	110.2
G011	4/22/2024	12:15	45.41	17.1	62.8	6.17	700.8	2.28	16.74	110.3
G011	4/22/2024	12:18	45.41	17.2	63.0	6.17	687.4	2.19	27.25	109.6
G011	4/22/2024	12:21	45.41	17.1	62.8	6.17	677.3	2.07	40.73	109.7
G011	4/22/2024	12:24	45.41	17.0	62.6	6.17	665.7	1.96	47.62	110.2
G011	4/22/2024	12:27	45.41	17.0	62.6	6.17	657.8	1.86	60.14	110.6
G011	4/22/2024	12:30	45.41	17.0	62.6	6.16	645.1	1.80	11.46	110.8
G011	4/22/2024	12:33	45.41	17.1	62.8	6.16	641.0	1.73	11.82	111.4
G011	4/22/2024	12:36	45.41	17.1	62.8	6.16	631.7	1.65	20.02	111.6

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G051D	4/22/2024	14:47	42.42	17.3	63.1	5.42	405.7	3.40	60.14	199.0
G051D	4/22/2024	14:50	42.42	17.3	63.1	5.40	406.7	3.34	46.88	208.2
G051D	4/22/2024	14:53	42.42	17.2	63.0	5.40	406.4	3.32	42.31	213.7
G051D	4/22/2024	14:56	42.42	17.2	62.9	5.40	406.6	3.47	39.78	217.7
G051D	4/22/2024	14:59	42.42	17.2	62.9	5.40	395.8	3.34	37.37	221.1
G051D	4/22/2024	15:02	42.42	17.1	62.8	5.40	403.2	3.37	39.48	223.9

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G052D	4/23/2024	9:01	27.2	15.1	59.2	6.29	399.7	0.78	4.91	-92.7
G052D	4/23/2024	9:04	27.2	15.1	59.2	6.32	400.0	0.65	5.26	-98.2
G052D	4/23/2024	9:07	27.2	15.2	59.4	6.34	400.1	0.64	4.76	-102.7
G052D	4/23/2024	9:10	27.2	15.2	59.4	6.35	400.3	0.61	4.28	-105.6
G052D	4/23/2024	9:13	27.2	15.2	59.4	6.36	400.5	0.57	2.19	-107.9
G052D	4/23/2024	9:16	27.2	15.2	59.4	6.36	400.5	0.51	2.34	-109.3
G052D	4/23/2024	9:19	27.2	15.2	59.4	6.37	400.5	0.50	2.66	-110.5

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G053D	4/23/2024	10:12	36.03	16.4	61.5	6.41	476.1	0.27	16.83	7.7
G053D	4/23/2024	10:15	36.03	16.4	61.5	6.40	473.9	0.23	22.47	10.0
G053D	4/23/2024	10:18	36.03	16.4	61.5	6.40	472.2	0.20	26.55	14.7
G053D	4/23/2024	10:21	36.03	16.5	61.7	6.40	471.7	0.19	26.73	19.0
G053D	4/23/2024	10:24	36.03	16.5	61.7	6.40	471.1	0.18	31.25	21.6
G053D	4/23/2024	10:27	36.03	16.5	61.7	6.40	470.6	0.17	34.80	23.8
G053D	4/23/2024	10:30	36.03	16.5	61.7	6.39	470.3	0.16	36.77	25.8

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G054D	4/22/2024	13:55	37.91	16.6	61.9	6.59	838.2	0.24	6.60	-3.7
G054D	4/22/2024	13:58	37.91	16.7	62.1	6.60	837.4	0.16	6.65	-4.6
G054D	4/22/2024	14:01	37.91	16.6	61.9	6.60	835.9	0.14	8.20	-4.5
G054D	4/22/2024	14:04	37.91	16.6	61.9	6.61	835.1	0.13	10.17	-4.9

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XPW01_pore	4/23/2024	12:43	14.68	19.7	67.5	8.06	923.0	0.82	3.34	-168.2
XPW01_pore	4/23/2024	12:46	14.68	19.8	67.6	8.22	924.2	0.67	2.57	-173.8
XPW01_pore	4/23/2024	12:49	14.68	19.6	67.3	8.39	932.8	0.51	2.41	-185.1
XPW01_pore	4/23/2024	12:52	14.68	19.6	67.3	8.45	938.3	0.37	4.31	-192.3
XPW01_pore	4/23/2024	12:55	14.68	19.8	67.6	8.48	942.2	0.29	3.56	-196.0

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XPW02_pore	4/23/2024	13:23	4.55	18.0	64.4	7.65	4,800.4	0.37	24.17	-168.6
XPW02_pore	4/23/2024	13:26	4.55	17.9	64.2	7.67	4,811.5	0.35	14.42	-172.1
XPW02_pore	4/23/2024	13:29	4.55	18.0	64.4	7.67	4,809.3	0.61	3.49	-175.7
XPW02_pore	4/23/2024	13:32	4.55	17.9	64.2	7.68	4,804.8	0.58	3.62	-176.5
XPW02_pore	4/23/2024	13:35	4.55	18.1	64.6	7.68	4,805.9	0.61	4.58	-177.4

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XPW03_pore	4/23/2024	12:02	14.46	18.2	64.8	10.73	641.1	1.38	1.99	-111.0
XPW03_pore	4/23/2024	12:05	14.46	19.1	66.4	10.70	639.5	1.40	1.99	-112.1
XPW03_pore	4/23/2024	12:08	14.46	20.0	68.0	10.68	639.0	1.48	1.92	-112.1
XPW03_pore	4/23/2024	12:11	14.46	20.5	68.9	10.65	638.1	1.58	1.75	-111.5
XPW03_pore	4/23/2024	12:14	14.46	20.8	69.4	10.65	640.3	1.66	1.71	-111.1
XPW03_pore	4/23/2024	12:17	14.46	20.7	69.3	10.65	642.2	1.67	1.52	-111.2
XPW03_pore	4/23/2024	12:20	14.46	20.7	69.3	10.65	641.3	1.66	1.74	-112.4

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

LIMS Workorder: 24041007

Joppa- 2Q 2024

JOP-257-401

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XSG01	4/22/2024	11:09	DTW Only							

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

LIMS Workorder: 24041007

Joppa- 2Q 2024

JOP-257-401

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
YSG03	4/22/2024	13:17	DTW Only							

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

LIMS Workorder: 24041007

Joppa- 2Q 2024

JOP-257-401

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
Field Blank	4/23/2024	12:30	-	QA/QC Sample						

Site Sampling Event: Joppa- 2Q 2024

Groundwater Sampling Field Forms- Groundwater Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24041007

Joppa- 2Q 2024

Technician(s): DC, JC, TC, BG, PY

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G052D Duplicate	4/23/2024	9:01	27.2	15.1	59.2	6.29	399.7	0.78	4.91	-92.7
G052D Duplicate	4/23/2024	9:04	27.2	15.1	59.2	6.32	400.0	0.65	5.26	-98.2
G052D Duplicate	4/23/2024	9:07	27.2	15.2	59.4	6.34	400.1	0.64	4.76	-102.7
G052D Duplicate	4/23/2024	9:10	27.2	15.2	59.4	6.35	400.3	0.61	4.28	-105.6
G052D Duplicate	4/23/2024	9:13	27.2	15.2	59.4	6.36	400.5	0.57	2.19	-107.9
G052D Duplicate	4/23/2024	9:16	27.2	15.2	59.4	6.36	400.5	0.51	2.34	-109.3
G052D Duplicate	4/23/2024	9:19	27.2	15.2	59.4	6.37	400.5	0.50	2.66	-110.5

Site Sampling Event: Joppa- 2Q 2024

LIMS Workorder: 24041007

Technician(s): DC, JC, TC, BG, PY

Field Calibration Log(s)

Joppa- 2Q 2024

Field Temp SOP 1156 - SM 2550 B
 Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
 Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 26599 Technician(s): Justin Colp Date: 4/22/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230830b	4.02	4/22/24 10:37
7.0 Buffer	wc240307f	7.00	4/22/24 10:42
10.0 Buffer	wc231027d	10.01	4/22/24 10:45
LCS/CCV (7.0 Buffer)	wc230217a		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 μ S Std.	95009	1413	4/22/24 10:49

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.46	4/22/24 10:55
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity μ S	Turbidity NTU	ORP mV	D.O. %
LCS-1	LCS	4/22/24 10:56	17.4	7.00	1,413	0.46		
CCV-1	CCV	4/22/24 15:10	23.01	7.01	1,425	0.48		

Comments:

Field Meter ID: Pine 26599 Technician(s): Justin Colp Date: 4/23/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230830b	4.03	4/23/24 7:20
7.0 Buffer	wc240307f	7.03	4/23/24 7:26
10.0 Buffer	wc231027d	10.01	4/23/24 7:33
LCS/CCV (7.0 Buffer)	wc230217a		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 μ S Std.	95009	1412	4/23/24 7:36

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.46	4/23/24 7:41
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity μ S	Turbidity NTU	ORP mV	D.O. %
LCS-2	LCS	4/23/24 7:48	16.98	7.01	1,412	0.46		
CCV-2	CCV	4/23/24 11:36	17.4	7.03	1,447	0.67		

Comments:

Site Sampling Event: Joppa- 2Q 2024

LIMS Workorder: 24041007

Technician(s): DC, JC, TC, BG, PY

Field Calibration Log(s)

Joppa- 2Q 2024

Field Temp SOP 1156 - SM 2550 B
 Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
 Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 218083 Technician(s): Tracy Carroll Date: 4/22/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	4/22/24 11:17
7.0 Buffer	240307F	7.00	4/22/24 11:15
10.0 Buffer	WC230619B	10.00	4/22/24 11:20
LCS/CCV (7.0 Buffer)	WC230217A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1412	4/22/24 11:22

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	1.39	4/22/24 11:25
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-1	LCS	4/22/24 11:32	13.9	7.08	1,413	1.5		
CCV-1	CCV	4/22/24 15:31	18.2	7.07	1,383	1.46		

Comments:

Field Meter ID: Pine 218083 Technician(s): Tracy Carroll/Danny Crump Date: 4/23/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	4/23/24 8:41
7.0 Buffer	240307F	7.00	4/23/24 8:38
10.0 Buffer	WC230619B	10.00	4/23/24 8:43
LCS/CCV (7.0 Buffer)	WC230217A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1412	4/23/24 8:46

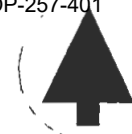
Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.79	4/23/24 8:47
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-2	LCS	4/23/24 8:48	12.6	7.08	1,409	0.79		
CCV-M-2	CCV	4/23/24 11:48	20.6	7.01	1,388	0.77		
CCV-2	CCV	4/23/24 15:24	21.7	6.98	1,370	0.78		

Comments:



INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

11669 Lilburn Park Rd.
St. Louis, MO 63146
Office: 314.344.1079

Pine Environmental Services, Inc.

Instrument ID 26599
Description YSI ProDSS
Calibrated 3/25/2024 12:25:29PM

Group # 5				Range Acc % 0.0000			
Group Name Dissolved Oxygen Span				Reading Acc % 3.0000			
Stated Accy Pct of Reading				Plus/Minus 0.0			
<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
100.0 / 100.0	%	100.0	%	96.9	99.3	-0.70%	Pass

<u>Test Instruments Used During the Calibration</u>					<u>(As Of Cal Entry Date)</u>	
<u>Test Standard ID</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Model Number</u>	<u>Serial Number / Lot Number</u>	<u>Last Cal Date / Opened Date</u>	<u>Next Cal Date / Expiration Date</u>
STL 126 NTU L#23E24002133	STL 126 NTU L#23E24002133	YSI	126 NTU	23E24002133		5/20/2024
STL 1413 COND L#4GB0749	STL 1413 COND L#4GB0749	AquaPhoenix Scientific	31986	4GB0749		2/25/2025
STL AUTOCAL L#24009059	Auto Cal Solution 0 NTU/PH 4	GFS	8483	24009059		3/20/2025
STL ORP SOLUTION 240MV L#3GJ0994	STL ORP SOLUTION 240MV L#3GJ0994	AquaPhoenix Scientific	ORP Solution	3GJ0994		7/25/2024
STL PH10 #3GK0004	STL PH10 #3GK0004	AquaPhoenix Scientific	PH 10	3GK0004		11/25/2025
STL PH4 L#3GH0675	STL pH4 L#3GH0675	AquaPhoenix Scientific	pH 4	3GH0675		8/25/2025
STL PH7 L#3GK1332	STL PH7 L#3GK1332	AquaPhoenix Scientific	PH7	3GK1332		11/25/2025

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Chris Harkins

All instruments are calibrated by Pine Environmental Services LLC according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services LLC of any defect within 24 hours of receipt of equipment
Please call 800-301-9663 for Technical Assistance



INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

11669 Lilburn Park Rd.
St. Louis, MO 63146
Office: 314.344.1079

Pine Environmental Services, Inc.

Instrument ID 26599
Description YSI ProDSS
Calibrated 3/25/2024 12:25:29PM

Manufacturer YSI
Model Number ProDSS
Serial Number/ Lot 15H101893
Number
Location St. Louis
Department

State Certified
Status Pass
Temp °C 22.2
Humidity % 43

Calibration Specifications

Group # 1
Group Name PH
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
7.00 / 7.00	PH	7.00	PH	7.25	7.02	0.29%	Pass
4.00 / 4.00	PH	4.00	PH	4.31	4.00	0.00%	Pass
10.00 / 10.00	PH	10.00	PH	10.15	10.05	0.50%	Pass

Group # 2
Group Name Turbidity
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
0.00 / 0.00	NTU	0.00	NTU	0.36	0.00	0.00%	Pass
124.00 / 124.00	NTU	124.00	NTU	118.31	124.00	0.00%	Pass

Group # 3
Group Name Conductivity
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.000

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
1.413 / 1.413	ms/cm	1.413	ms/cm	1.469	1.413	0.00%	Pass

Group # 4
Group Name Redox (ORP)
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.0

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
240.0 / 240.0	mv	240.0	mv	224.4	240.0	0.00%	Pass

Group # 5
Group Name Dissolved Oxygen Span
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.0

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>



INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

11669 Lilburn Park Rd.
St. Louis, MO 63146
Office: 314.344.1079

Pine Environmental Services, Inc.

Instrument ID 218083
Description YSI Pro DSS Sonde
Calibrated 3/27/2024 5:59:58PM

Group # 5		Range Acc % 0.0000	
Group Name Dissolved Oxygen Span		Reading Acc % 3.0000	
Stated Accy Pct of Reading		Plus/Minus 0.00	
Nom In Val / In Val	In Type	Out Val	Out Type
100.00 / 100.00	%	100.00	%
End As		Lft As	Dev%
97.30		100.00	0.00%
		Pass/Fail	
		Pass	

Test Instruments Used During the Calibration

(As Of Cal Entry Date)

<u>Test Standard ID</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Model Number</u>	<u>Serial Number / Lot Number</u>	<u>Next Cal Date / Expiration Date</u>
STL 126 NTU	STL 126 NTU	YSI	126 NTU	23E24002133	5/20/2024
L#23E24002133	L#23E24002133				
STL 1413	STL 1413 COND	AquaPhoenix	31986	4GB0749	2/25/2025
COND	L#4GB0749	Scientific			
L#4GB0749					
STL AUTOCAL	Auto Cal Solution 0	GFS	8483	24009059	3/20/2025
L#24009059	NTU/PH 4				
STL ORP	STL ORP SOLUTION	AquaPhoenix	ORP Solution	3GJ0994	7/25/2024
SOLUTION	240MV L#3GJ0994	Scientific			
240MV					
L#3GJ0994					
STL PH10	STL PH10 #3GK0004	AquaPhoenix	PH 10	3GK0004	11/25/2025
#3GK0004		Scientific			
STL PH4	STL pH4 L#3GH0675	AquaPhoenix	pH 4	3GH0675	8/25/2025
L#3GH0675		Scientific			
STL PH7	STL PH7 L#3GK1332	AquaPhoenix	PH7	3GK1332	11/25/2025
L#3GK1332		Scientific			

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Chris Harkins

All instruments are calibrated by Pine Environmental Services LLC according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services LLC of any defect within 24 hours of receipt of equipment
Please call 800-301-9663 for Technical Assistance



INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

11669 Lilburn Park Rd.
St. Louis, MO 63146
Office: 314.344.1079

Pine Environmental Services, Inc.

Instrument ID 218083
Description YSI Pro DSS Sonde
Calibrated 3/27/2024 5:59:58PM

Manufacturer YSI
Model Number Pro DSS
Serial Number/ Lot 23F102674
Number
Location St. Louis
Department

State Certified
Status Pass
Temp °C 22.2
Humidity % 43

Calibration Specifications

Group # 1
Group Name PH
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
7.00 / 7.00	PH	7.00	PH	7.30	7.02	0.29%	Pass
4.00 / 4.00	PH	4.00	PH	4.31	4.00	0.00%	Pass
10.00 / 10.00	PH	10.00	PH	10.24	10.05	0.50%	Pass

Group # 2
Group Name Turbidity (NTU)
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
0.00 / 0.00	FNU	0.00	FNU	0.59	0.00	0.00%	Pass
124.00 / 124.00	FNU	124.00	FNU	118.44	124.00	0.00%	Pass

Group # 3
Group Name Conductivity
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.000

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
1.413 / 1.413	ms/cm	1.413	ms/cm	1.474	1.413	0.00%	Pass

Group # 4
Group Name Redox (ORP)
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
240.00 / 240.00	mv	240.00	mv	228.50	240.00	0.00%	Pass

Group # 5
Group Name Dissolved Oxygen Span
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>

August 12, 2024

Eric Bauer
Ramboll
234 W. Florida Street
Fifth Floor
Milwaukee, WI 53204
TEL: (414) 837-3607
FAX: (414) 837-3608



Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: JOP-24Q3

WorkOrder: 24071132

Dear Eric Bauer:

TEKLAB, INC received 21 samples for JOP_257_401 on 7/24/2024 5:20:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Elizabeth A. Hurley
Director of Customer Service
(618)344-1004 ex 33
ehurley@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

This reporting package includes the following:

Cover Letter	1
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Laboratory Results	7
Sample Summary	46
Quality Control Results	47
Receiving Check List	65
Chain of Custody	Appended

Definitions

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

Abbr Definition

* Analytes on report marked with an asterisk are not NELAP accredited

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.

DNI Did not ignite

DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

TNTC Too numerous to count (> 200 CFU)



Definitions

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

Qualifiers

# - Unknown hydrocarbon	B - Analyte detected in associated Method Blank
C - RL shown is a Client Requested Quantitation Limit	E - Value above quantitation range
H - Holding times exceeded	I - Associated internal standard was outside method criteria
J - Analyte detected below quantitation limits	M - Manual Integration used to determine area response
ND - Not Detected at the Reporting Limit	R - RPD outside accepted recovery limits
S - Spike Recovery outside recovery limits	T - TIC(Tentatively identified compound)
X - Value exceeds Maximum Contaminant Level	



Case Narrative

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

Cooler Receipt Temp: 6.9 °C

An employee of Teklab, Inc. collected the sample(s).

SG03 and XSG01 collection date/times per depth files. EAH 7/25/24

G11, G111, G53D, XPW02, and XPW03 collection dates/times per field file. EAH 7/31/24

Per Eric Bauer's request, only JOP_257_401 data is included in this report. EAH 8/12/24

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com



Accreditations

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Illinois	IEPA	1004652024-2	NELAP	4/30/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2025	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2025	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2025	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2025	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2026	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Mississippi	MSDH			4/30/2025	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-001
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24

Client Sample ID: G01D
Collection Date: 07/23/2024 9:38

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		42.90	ft	1	07/23/2024 9:38	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		37	NTU	1	07/23/2024 9:38	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		61	mV	1	07/23/2024 9:38	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		490	µS/cm	1	07/23/2024 9:38	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		18.1	°C	1	07/23/2024 9:38	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.49	mg/L	1	07/23/2024 9:38	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		6.35		1	07/23/2024 9:38	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		197	mg/L	1	07/25/2024 12:08	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	07/25/2024 12:08	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		350	mg/L	1	07/27/2024 11:33	R350897
SW-846 9036 (TOTAL)									
Sulfate	NELAP	12	20	S	43	mg/L	2	07/29/2024 13:51	R350922
<i>Matrix spike did not recover within control limits due to matrix interference.</i>									
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.18	mg/L	1	07/25/2024 10:18	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		15	mg/L	1	07/29/2024 13:40	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100	B	37.7	mg/L	1	07/25/2024 16:55	226113
Magnesium	NELAP	0.0055	0.0500		11.0	mg/L	1	07/25/2024 16:55	226113
Potassium	NELAP	0.0400	0.100		1.38	mg/L	1	07/25/2024 16:55	226113
Sodium	NELAP	0.0180	0.0500		70.8	mg/L	1	07/25/2024 16:55	226113
<i>Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.</i>									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	B	< 0.0010	mg/L	5	07/25/2024 23:36	226113
Arsenic	NELAP	0.0004	0.0010	J	0.0004	mg/L	5	07/25/2024 23:36	226113
Barium	NELAP	0.0007	0.0010		0.217	mg/L	5	07/25/2024 23:36	226113
Beryllium	NELAP	0.0002	0.0010	J	0.0006	mg/L	5	07/25/2024 23:36	226113
Boron	NELAP	0.0092	0.025	J	0.013	mg/L	5	07/25/2024 23:36	226113
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/25/2024 23:36	226113
Chromium	NELAP	0.0007	0.0015		0.0029	mg/L	5	07/25/2024 23:36	226113
Cobalt	NELAP	0.0001	0.0010		0.0012	mg/L	5	07/26/2024 11:05	226113
Lead	NELAP	0.0006	0.0010	J	0.0006	mg/L	5	07/25/2024 23:36	226113
Lithium	*	0.0015	0.0030	J	0.0015	mg/L	5	07/25/2024 23:36	226113
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	07/25/2024 23:36	226113
Selenium	NELAP	0.0006	0.0010		0.0011	mg/L	5	07/26/2024 11:05	226113
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/25/2024 23:36	226113



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-001
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: G01D
Collection Date: 07/23/2024 9:38

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
<i>Contamination present in the MBLK for Sb. Sample results below the reporting limit are reportable per the TNI Standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 13:07	226132



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-002
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24

Client Sample ID: G02D

Collection Date: 07/23/2024 10:38

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		43.22	ft	1	07/23/2024 10:38	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		4.3	NTU	1	07/23/2024 10:38	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		129	mV	1	07/23/2024 10:38	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		356	µS/cm	1	07/23/2024 10:38	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		16.8	°C	1	07/23/2024 10:38	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		2.06	mg/L	1	07/23/2024 10:38	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		6.41		1	07/23/2024 10:38	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		150	mg/L	1	07/25/2024 11:23	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	07/25/2024 11:23	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		218	mg/L	1	07/27/2024 11:34	R350897
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		17	mg/L	1	07/29/2024 16:22	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.20	mg/L	1	07/25/2024 10:21	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		19	mg/L	1	07/29/2024 16:23	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100	B	35.4	mg/L	1	07/25/2024 16:56	226113
Magnesium	NELAP	0.0055	0.0500		9.99	mg/L	1	07/25/2024 16:56	226113
Potassium	NELAP	0.0400	0.100		1.14	mg/L	1	07/25/2024 16:56	226113
Sodium	NELAP	0.0180	0.0500		34.4	mg/L	1	07/25/2024 16:56	226113
<i>Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.</i>									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	B	< 0.0010	mg/L	5	07/25/2024 23:42	226113
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	07/25/2024 23:42	226113
Barium	NELAP	0.0007	0.0010		0.189	mg/L	5	07/25/2024 23:42	226113
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	07/25/2024 23:42	226113
Boron	NELAP	0.0092	0.0250		0.0292	mg/L	5	07/25/2024 23:42	226113
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/25/2024 23:42	226113
Chromium	NELAP	0.0007	0.0015	J	0.0011	mg/L	5	07/25/2024 23:42	226113
Cobalt	NELAP	0.0001	0.0010		< 0.0010	mg/L	5	07/25/2024 23:42	226113
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/25/2024 23:42	226113
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	07/25/2024 23:42	226113
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	07/25/2024 23:42	226113
Selenium	NELAP	0.0006	0.0010		0.0023	mg/L	5	07/25/2024 23:42	226113
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/25/2024 23:42	226113

Contamination present in the MBLK for Sb. Sample results below the reporting limit are reportable per the TNI Standard.



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-002
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: G02D
Collection Date: 07/23/2024 10:38

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 13:09	226132



Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

Lab ID: 24071132-003

Client Sample ID: G03

Matrix: GROUNDWATER

Collection Date: 07/23/2024 11:37

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		38.22	ft	1	07/23/2024 11:37	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		50	NTU	1	07/23/2024 11:37	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		106	mV	1	07/23/2024 11:37	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		532	µS/cm	1	07/23/2024 11:37	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		17.9	°C	1	07/23/2024 11:37	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.96	mg/L	1	07/23/2024 11:37	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		6.31		1	07/23/2024 11:37	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		125	mg/L	1	07/25/2024 11:29	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	07/25/2024 11:29	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		340	mg/L	1	07/27/2024 11:46	R350897
SW-846 9036 (TOTAL)									
Sulfate	NELAP	12	20		62	mg/L	2	07/29/2024 16:49	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.22	mg/L	1	07/25/2024 10:27	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		23	mg/L	1	07/29/2024 16:44	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100	B	41.7	mg/L	1	07/25/2024 16:58	226113
Magnesium	NELAP	0.0055	0.0500		13.7	mg/L	1	07/25/2024 16:58	226113
Potassium	NELAP	0.0400	0.100		1.35	mg/L	1	07/25/2024 16:58	226113
Sodium	NELAP	0.0180	0.0500		32.0	mg/L	1	07/25/2024 16:58	226113

Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	B	< 0.0010	mg/L	5	07/25/2024 23:47	226113
Arsenic	NELAP	0.0004	0.0010		0.0017	mg/L	5	07/26/2024 11:36	226113
Barium	NELAP	0.0007	0.0010		0.0674	mg/L	5	07/25/2024 23:47	226113
Beryllium	NELAP	0.0002	0.0010	J	0.0004	mg/L	5	07/25/2024 23:47	226113
Boron	NELAP	0.0092	0.0250		0.194	mg/L	5	07/25/2024 23:47	226113
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/25/2024 23:47	226113
Chromium	NELAP	0.0007	0.0015		0.0108	mg/L	5	07/25/2024 23:47	226113
Cobalt	NELAP	0.0001	0.0010		0.0038	mg/L	5	07/25/2024 23:47	226113
Lead	NELAP	0.0006	0.0010		0.0027	mg/L	5	07/25/2024 23:47	226113
Lithium	*	0.0015	0.0030		0.0034	mg/L	5	07/25/2024 23:47	226113
Molybdenum	NELAP	0.0006	0.0015	J	0.0010	mg/L	5	07/25/2024 23:47	226113
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/25/2024 23:47	226113
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/25/2024 23:47	226113

Contamination present in the MBLK for Sb. Sample results below the reporting limit are reportable per the TNI Standard.



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-003
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: G03
Collection Date: 07/23/2024 11:37

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 13:11	226132



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-004
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24

Client Sample ID: G05

Collection Date: 07/24/2024 11:43

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		43.27	ft	1	07/24/2024 11:43	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		44	NTU	1	07/24/2024 11:43	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		27	mV	1	07/24/2024 11:43	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		540	µS/cm	1	07/24/2024 11:43	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		19.2	°C	1	07/24/2024 11:43	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.65	mg/L	1	07/24/2024 11:43	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		6.40		1	07/24/2024 11:43	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		185	mg/L	1	07/25/2024 11:33	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	07/25/2024 11:33	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		396	mg/L	1	07/29/2024 9:11	R350969
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50		90	mg/L	5	07/29/2024 16:57	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.40	mg/L	1	07/25/2024 10:35	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		21	mg/L	1	07/29/2024 16:52	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		56.1	mg/L	1	07/29/2024 12:07	226204
Magnesium	NELAP	0.0055	0.0500		19.8	mg/L	1	07/29/2024 12:07	226204
Potassium	NELAP	0.0400	0.100		1.80	mg/L	1	07/29/2024 12:07	226204
Sodium	NELAP	0.0180	0.0500		48.1	mg/L	1	07/29/2024 12:07	226204
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	07/29/2024 11:52	226204
Arsenic	NELAP	0.0004	0.0010		0.0010	mg/L	5	07/26/2024 18:09	226204
Barium	NELAP	0.0007	0.0010		0.186	mg/L	5	07/26/2024 18:09	226204
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 18:09	226204
Boron	NELAP	0.0092	0.0250		0.0382	mg/L	5	07/29/2024 11:52	226204
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 18:09	226204
Chromium	NELAP	0.0007	0.0015		0.0017	mg/L	5	07/26/2024 18:09	226204
Cobalt	NELAP	0.0001	0.0010		0.0021	mg/L	5	07/26/2024 18:09	226204
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/29/2024 11:52	226204
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	07/26/2024 18:09	226204
Molybdenum	NELAP	0.0006	0.0015		0.0043	mg/L	5	07/26/2024 18:09	226204
Selenium	NELAP	0.0006	0.0010		0.0020	mg/L	5	07/26/2024 18:09	226204
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/26/2024 18:09	226204



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-004
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: G05
Collection Date: 07/24/2024 11:43

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 16:12	226214



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-005
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24

Client Sample ID: G06

Collection Date: 07/24/2024 10:53

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		40.42	ft	1	07/24/2024 10:53	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		98	NTU	1	07/24/2024 10:53	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		185	mV	1	07/24/2024 10:53	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		643	µS/cm	1	07/24/2024 10:53	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		17.5	°C	1	07/24/2024 10:53	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.39	mg/L	1	07/24/2024 10:53	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		6.48		1	07/24/2024 10:53	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		166	mg/L	1	07/25/2024 11:39	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	07/25/2024 11:39	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		566	mg/L	1	07/29/2024 9:12	R350969
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		199	mg/L	10	07/29/2024 17:21	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.27	mg/L	1	07/25/2024 10:37	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		21	mg/L	1	07/29/2024 17:16	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		82.8	mg/L	1	07/29/2024 12:19	226204
Magnesium	NELAP	0.0055	0.0500		23.5	mg/L	1	07/29/2024 12:19	226204
Potassium	NELAP	0.0400	0.100		2.76	mg/L	1	07/29/2024 12:19	226204
Sodium	NELAP	0.0180	0.0500		45.7	mg/L	1	07/29/2024 12:19	226204
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0008	0.0010		0.0010	mg/L	5	07/26/2024 18:15	226204
Arsenic	NELAP	0.0004	0.0010		0.0017	mg/L	5	07/26/2024 18:15	226204
Barium	NELAP	0.0007	0.0010		0.0430	mg/L	5	07/26/2024 18:15	226204
Beryllium	NELAP	0.0002	0.0010	J	0.0003	mg/L	5	07/26/2024 18:15	226204
Boron	NELAP	0.0092	0.0250		3.25	mg/L	5	07/29/2024 12:44	226204
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 18:15	226204
Chromium	NELAP	0.0007	0.0015		0.0083	mg/L	5	07/26/2024 18:15	226204
Cobalt	NELAP	0.0001	0.0010		0.0017	mg/L	5	07/26/2024 18:15	226204
Lead	NELAP	0.0006	0.0010		0.0023	mg/L	5	07/29/2024 12:44	226204
Lithium	*	0.0015	0.0030		0.0043	mg/L	5	07/26/2024 18:15	226204
Molybdenum	NELAP	0.0006	0.0015	J	0.0009	mg/L	5	07/26/2024 18:15	226204
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/26/2024 18:15	226204
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/26/2024 18:15	226204



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-005
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: G06
Collection Date: 07/24/2024 10:53

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 16:14	226214



APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
Laboratory Results
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

<http://www.teklabinc.com/>

Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-006
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24

Client Sample ID: G07
Collection Date: 07/24/2024 9:48

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		40.55	ft	1	07/24/2024 9:48	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		86	NTU	1	07/24/2024 9:48	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		202	mV	1	07/24/2024 9:48	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		768	µS/cm	1	07/24/2024 9:48	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		16.8	°C	1	07/24/2024 9:48	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.46	mg/L	1	07/24/2024 9:48	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		6.17		1	07/24/2024 9:48	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		170	mg/L	1	07/25/2024 11:44	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	07/25/2024 11:44	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		676	mg/L	1	07/29/2024 9:12	R350969
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		274	mg/L	10	07/29/2024 17:29	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.44	mg/L	1	07/25/2024 10:39	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		21	mg/L	1	07/29/2024 17:24	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		93.9	mg/L	1	07/29/2024 12:21	226204
Magnesium	NELAP	0.0055	0.0500		23.9	mg/L	1	07/29/2024 12:21	226204
Potassium	NELAP	0.0400	0.100		4.40	mg/L	1	07/29/2024 12:21	226204
Sodium	NELAP	0.0180	0.0500		70.3	mg/L	1	07/29/2024 12:21	226204
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0008	0.0010		< 0.0010	mg/L	5	07/26/2024 18:21	226204
Arsenic	NELAP	0.0004	0.0010	J	0.0008	mg/L	5	07/26/2024 18:21	226204
Barium	NELAP	0.0007	0.0010		0.0563	mg/L	5	07/26/2024 18:21	226204
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 18:21	226204
Boron	NELAP	0.0092	0.0250		4.83	mg/L	5	07/29/2024 12:50	226204
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 18:21	226204
Chromium	NELAP	0.0007	0.0015		0.0059	mg/L	5	07/26/2024 18:21	226204
Cobalt	NELAP	0.0001	0.0010		0.0013	mg/L	5	07/26/2024 18:21	226204
Lead	NELAP	0.0006	0.0010		0.0012	mg/L	5	07/29/2024 12:50	226204
Lithium	*	0.0015	0.0030		0.0030	mg/L	5	07/26/2024 18:21	226204
Molybdenum	NELAP	0.0006	0.0015	J	0.0007	mg/L	5	07/26/2024 18:21	226204
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/26/2024 18:21	226204
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/26/2024 18:21	226204



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-006
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: G07
Collection Date: 07/24/2024 9:48

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 16:16	226214



Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

Lab ID: 24071132-007

Client Sample ID: G08

Matrix: GROUNDWATER

Collection Date: 07/24/2024 13:28

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		32.83	ft	1	07/24/2024 13:28	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		22	NTU	1	07/24/2024 13:28	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		-59	mV	1	07/24/2024 13:28	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		823	µS/cm	1	07/24/2024 13:28	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		18.2	°C	1	07/24/2024 13:28	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.34	mg/L	1	07/24/2024 13:28	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		7.06		1	07/24/2024 13:28	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		161	mg/L	1	07/25/2024 11:50	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	07/25/2024 11:50	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		670	mg/L	1	07/29/2024 9:12	R350969
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		325	mg/L	10	07/29/2024 17:37	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.30	mg/L	1	07/25/2024 10:41	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		13	mg/L	1	07/29/2024 17:32	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		128	mg/L	1	07/29/2024 12:22	226204
Magnesium	NELAP	0.0055	0.0500		31.7	mg/L	1	07/29/2024 12:22	226204
Potassium	NELAP	0.0400	0.100		1.79	mg/L	1	07/29/2024 12:22	226204
Sodium	NELAP	0.0180	0.0500		40.2	mg/L	1	07/29/2024 12:22	226204
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0008	0.0010		< 0.0010	mg/L	5	07/26/2024 18:27	226204
Arsenic	NELAP	0.0004	0.0010		0.0064	mg/L	5	07/26/2024 18:27	226204
Barium	NELAP	0.0007	0.0010		0.0400	mg/L	5	07/26/2024 18:27	226204
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 18:27	226204
Boron	NELAP	0.0092	0.0250		5.88	mg/L	5	07/29/2024 14:22	226204
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 18:27	226204
Chromium	NELAP	0.0007	0.0015		0.0025	mg/L	5	07/26/2024 18:27	226204
Cobalt	NELAP	0.0001	0.0010		0.0034	mg/L	5	07/26/2024 18:27	226204
Lead	NELAP	0.0006	0.0010	J	0.0007	mg/L	5	07/29/2024 14:22	226204
Lithium	*	0.0015	0.0030	J	0.0018	mg/L	5	07/26/2024 18:27	226204
Molybdenum	NELAP	0.0006	0.0015		0.0018	mg/L	5	07/26/2024 18:27	226204
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/26/2024 18:27	226204
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/26/2024 18:27	226204



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-007
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: G08
Collection Date: 07/24/2024 13:28

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 16:19	226214



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-008
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24

Client Sample ID: G09

Collection Date: 07/23/2024 10:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		40.61	ft	1	07/23/2024 10:35	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		180	NTU	1	07/23/2024 10:35	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		52	mV	1	07/23/2024 10:35	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		669	µS/cm	1	07/23/2024 10:35	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		17.7	°C	1	07/23/2024 10:35	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.27	mg/L	1	07/23/2024 10:35	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		6.37		1	07/23/2024 10:35	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		99	mg/L	1	07/25/2024 12:21	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	07/25/2024 12:21	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		506	mg/L	1	07/27/2024 11:47	R350897
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		253	mg/L	10	07/29/2024 17:44	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.32	mg/L	1	07/25/2024 10:43	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		16	mg/L	1	07/29/2024 17:40	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100	B	58.4	mg/L	1	07/25/2024 16:59	226113
Magnesium	NELAP	0.0055	0.0500		22.9	mg/L	1	07/25/2024 16:59	226113
Potassium	NELAP	0.0400	0.100		1.05	mg/L	1	07/25/2024 16:59	226113
Sodium	NELAP	0.0180	0.0500		53.1	mg/L	1	07/25/2024 16:59	226113
<i>Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.</i>									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		0.0019	mg/L	5	07/26/2024 11:42	226113
Arsenic	NELAP	0.0004	0.0010		0.0052	mg/L	5	07/26/2024 0:34	226113
Barium	NELAP	0.0007	0.0010		0.0630	mg/L	5	07/26/2024 0:34	226113
Beryllium	NELAP	0.0002	0.0010		0.0011	mg/L	5	07/26/2024 11:42	226113
Boron	NELAP	0.0092	0.0250		3.34	mg/L	5	07/26/2024 11:42	226113
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 0:34	226113
Chromium	NELAP	0.0007	0.0015		0.0128	mg/L	5	07/26/2024 11:42	226113
Cobalt	NELAP	0.0001	0.0010		0.0046	mg/L	5	07/26/2024 0:34	226113
Lead	NELAP	0.0006	0.0010		0.0032	mg/L	5	07/26/2024 0:34	226113
Lithium	*	0.0015	0.0030		0.0046	mg/L	5	07/26/2024 11:42	226113
Molybdenum	NELAP	0.0006	0.0015	J	0.0010	mg/L	5	07/26/2024 0:34	226113
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/26/2024 0:34	226113
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/26/2024 0:34	226113



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-008
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: G09
Collection Date: 07/23/2024 10:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 13:13	226132



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-009
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24

Client Sample ID: G10

Collection Date: 07/24/2024 12:46

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		41.03	ft	1	07/24/2024 12:46	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		85	NTU	1	07/24/2024 12:46	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		97	mV	1	07/24/2024 12:46	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		1030	µS/cm	1	07/24/2024 12:46	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		18.2	°C	1	07/24/2024 12:46	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.47	mg/L	1	07/24/2024 12:46	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		6.63		1	07/24/2024 12:46	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		244	mg/L	1	08/07/2024 11:51	R351382
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	08/07/2024 11:51	R351382
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		794	mg/L	1	07/29/2024 9:35	R350969
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		335	mg/L	10	07/29/2024 17:52	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.68	mg/L	1	07/25/2024 10:45	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		19	mg/L	1	07/29/2024 17:48	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		118	mg/L	1	07/29/2024 12:24	226204
Magnesium	NELAP	0.0055	0.0500		35.4	mg/L	1	07/29/2024 12:24	226204
Potassium	NELAP	0.0400	0.100		9.54	mg/L	1	07/29/2024 12:24	226204
Sodium	NELAP	0.0180	0.0500		79.8	mg/L	1	07/29/2024 12:24	226204
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0008	0.0010		< 0.0010	mg/L	5	07/26/2024 18:34	226204
Arsenic	NELAP	0.0004	0.0010		0.0050	mg/L	5	07/26/2024 18:34	226204
Barium	NELAP	0.0007	0.0010		0.0376	mg/L	5	07/26/2024 18:34	226204
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 18:34	226204
Boron	NELAP	0.0092	0.0250		2.65	mg/L	5	07/29/2024 14:28	226204
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 18:34	226204
Chromium	NELAP	0.0007	0.0015		0.0024	mg/L	5	07/26/2024 18:34	226204
Cobalt	NELAP	0.0001	0.0010		0.0024	mg/L	5	07/26/2024 18:34	226204
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/29/2024 14:28	226204
Lithium	*	0.0015	0.0030		0.0151	mg/L	5	07/26/2024 18:34	226204
Molybdenum	NELAP	0.0006	0.0015		0.0018	mg/L	5	07/26/2024 18:34	226204
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/26/2024 18:34	226204
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/26/2024 18:34	226204



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-009
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: G10
Collection Date: 07/24/2024 12:46

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 16:21	226214



Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

Lab ID: 24071132-015

Client Sample ID: G11

Matrix: GROUNDWATER

Collection Date: 07/23/2024 11:32

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		49.24	ft	1	07/23/2024 11:32	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		57	NTU	1	07/23/2024 11:32	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		89	mV	1	07/23/2024 11:32	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		350	µS/cm	1	07/23/2024 11:32	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		18.0	°C	1	07/23/2024 11:32	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		2.90	mg/L	1	07/23/2024 11:32	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		6.74		1	07/23/2024 11:32	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		87	mg/L	1	07/25/2024 12:38	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	07/25/2024 12:38	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		638	mg/L	1	07/29/2024 9:37	R350969
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		245	mg/L	10	07/29/2024 19:39	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.24	mg/L	1	07/25/2024 11:04	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		25	mg/L	1	07/29/2024 19:34	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		73.2	mg/L	1	07/29/2024 12:52	226204
Magnesium	NELAP	0.0055	0.0500		23.8	mg/L	1	07/29/2024 12:52	226204
Potassium	NELAP	0.0400	0.100		1.80	mg/L	1	07/29/2024 12:52	226204
Sodium	NELAP	0.0180	0.0500		46.1	mg/L	1	07/29/2024 12:52	226204
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0008	0.0010	J	0.0010	mg/L	5	07/26/2024 19:36	226204
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	07/26/2024 19:36	226204
Barium	NELAP	0.0007	0.0010		0.0190	mg/L	5	07/26/2024 19:36	226204
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 19:36	226204
Boron	NELAP	0.0092	0.0250		0.372	mg/L	5	07/29/2024 15:25	226204
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 19:36	226204
Chromium	NELAP	0.0007	0.0015	J	0.0010	mg/L	5	07/26/2024 19:36	226204
Cobalt	NELAP	0.0001	0.0010	J	0.0009	mg/L	5	07/26/2024 19:36	226204
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/29/2024 15:25	226204
Lithium	*	0.0015	0.0030		0.0040	mg/L	5	07/26/2024 19:36	226204
Molybdenum	NELAP	0.0006	0.0015	J	0.0006	mg/L	5	07/26/2024 19:36	226204
Selenium	NELAP	0.0006	0.0010		0.0026	mg/L	5	07/26/2024 19:36	226204
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/26/2024 19:36	226204



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-015
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: G11
Collection Date: 07/23/2024 11:32

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 16:28	226214



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-017
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24

Client Sample ID: G51D

Collection Date: 07/23/2024 12:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		44.19	ft	1	07/23/2024 12:35	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		34	NTU	1	07/23/2024 12:35	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		183	mV	1	07/23/2024 12:35	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		353	µS/cm	1	07/23/2024 12:35	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		19.8	°C	1	07/23/2024 12:35	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		2.11	mg/L	1	07/23/2024 12:35	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		5.56		1	07/23/2024 12:35	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		49	mg/L	1	07/25/2024 12:42	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	07/25/2024 12:42	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		328	mg/L	1	07/27/2024 12:11	R350897
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50		118	mg/L	5	07/29/2024 20:11	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.11	mg/L	1	07/25/2024 11:08	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		5	mg/L	1	07/29/2024 20:06	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100	B	27.3	mg/L	1	07/25/2024 17:06	226113
Magnesium	NELAP	0.0055	0.0500		11.5	mg/L	1	07/25/2024 17:06	226113
Potassium	NELAP	0.0400	0.100		0.361	mg/L	1	07/25/2024 17:06	226113
Sodium	NELAP	0.0180	0.0500		32.1	mg/L	1	07/25/2024 17:06	226113
<i>Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.</i>									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	B	< 0.0010	mg/L	5	07/26/2024 0:57	226113
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	07/26/2024 0:57	226113
Barium	NELAP	0.0007	0.0010		0.0365	mg/L	5	07/26/2024 0:57	226113
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 12:07	226113
Boron	NELAP	0.0092	0.0250		0.742	mg/L	5	07/26/2024 12:07	226113
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 0:57	226113
Chromium	NELAP	0.0007	0.0015		0.0015	mg/L	5	07/26/2024 12:07	226113
Cobalt	NELAP	0.0001	0.0010	J	0.0008	mg/L	5	07/26/2024 0:57	226113
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/26/2024 0:57	226113
Lithium	*	0.0015	0.0030		0.0055	mg/L	5	07/26/2024 12:07	226113
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	07/26/2024 0:57	226113
Selenium	NELAP	0.0006	0.0010		0.0058	mg/L	5	07/26/2024 0:57	226113
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/26/2024 0:57	226113

Contamination present in the MBLK for Sb. Sample results below the reporting limit are reportable per the TNI Standard.



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-017
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: G51D
Collection Date: 07/23/2024 12:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 13:16	226132



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-018
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24

Client Sample ID: G52D

Collection Date: 07/23/2024 9:26

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		25.77	ft	1	07/23/2024 9:26	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		33	NTU	1	07/23/2024 9:26	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		12	mV	1	07/23/2024 9:26	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		410	µS/cm	1	07/23/2024 9:26	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		17.9	°C	1	07/23/2024 9:26	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.95	mg/L	1	07/23/2024 9:26	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		6.74		1	07/23/2024 9:26	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		174	mg/L	1	07/25/2024 12:46	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	07/25/2024 12:46	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		324	mg/L	1	07/27/2024 12:11	R350897
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		40	mg/L	1	07/29/2024 20:14	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.32	mg/L	1	07/25/2024 11:11	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		12	mg/L	1	07/29/2024 20:14	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100	B	44.6	mg/L	1	07/25/2024 17:07	226113
Magnesium	NELAP	0.0055	0.0500		14.4	mg/L	1	07/25/2024 17:07	226113
Potassium	NELAP	0.0400	0.100		0.784	mg/L	1	07/25/2024 17:07	226113
Sodium	NELAP	0.0180	0.0500		31.8	mg/L	1	07/25/2024 17:07	226113
<i>Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.</i>									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	B	< 0.0010	mg/L	5	07/26/2024 1:02	226113
Arsenic	NELAP	0.0004	0.0010		0.0012	mg/L	5	07/26/2024 1:02	226113
Barium	NELAP	0.0007	0.0010		0.286	mg/L	5	07/26/2024 1:02	226113
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 12:13	226113
Boron	NELAP	0.0092	0.025	J	0.018	mg/L	5	07/26/2024 12:13	226113
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 1:02	226113
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	07/26/2024 12:13	226113
Cobalt	NELAP	0.0001	0.0010		0.0038	mg/L	5	07/26/2024 1:02	226113
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/26/2024 1:02	226113
Lithium	*	0.0015	0.0030		0.0030	mg/L	5	07/26/2024 12:13	226113
Molybdenum	NELAP	0.0006	0.0015	J	0.0007	mg/L	5	07/26/2024 1:02	226113
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/26/2024 1:02	226113
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/26/2024 1:02	226113

Contamination present in the MBLK for Sb. Sample results below the reporting limit are reportable per the TNI Standard.



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-018
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: G52D
Collection Date: 07/23/2024 9:26

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 13:22	226132



Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

Lab ID: 24071132-019

Client Sample ID: G53D

Matrix: GROUNDWATER

Collection Date: 07/24/2024 12:38

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		37.09	ft	1	07/24/2024 12:38	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		8.5	NTU	1	07/24/2024 12:38	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		61	mV	1	07/24/2024 12:38	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		442	µS/cm	1	07/24/2024 12:38	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		19.3	°C	1	07/24/2024 12:38	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.85	mg/L	1	07/24/2024 12:38	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		6.40		1	07/24/2024 12:38	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		165	mg/L	1	07/25/2024 12:50	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	07/25/2024 12:50	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		332	mg/L	1	07/29/2024 9:37	R350969
SW-846 9036 (TOTAL)									
Sulfate	NELAP	12	20		67	mg/L	2	07/29/2024 20:27	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.74	mg/L	1	07/25/2024 11:13	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		17	mg/L	1	07/29/2024 20:22	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		38.7	mg/L	1	07/29/2024 12:54	226204
Magnesium	NELAP	0.0055	0.0500		17.1	mg/L	1	07/29/2024 12:54	226204
Potassium	NELAP	0.0400	0.100		0.313	mg/L	1	07/29/2024 12:54	226204
Sodium	NELAP	0.0180	0.0500		50.5	mg/L	1	07/29/2024 12:54	226204
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0008	0.0010		< 0.0010	mg/L	5	07/26/2024 19:42	226204
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	07/26/2024 19:42	226204
Barium	NELAP	0.0007	0.0010		0.0908	mg/L	5	07/26/2024 19:42	226204
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 19:42	226204
Boron	NELAP	0.0092	0.0250		0.366	mg/L	5	07/29/2024 15:31	226204
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 19:42	226204
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	07/26/2024 19:42	226204
Cobalt	NELAP	0.0001	0.0010		0.0010	mg/L	5	07/26/2024 19:42	226204
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/29/2024 15:31	226204
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	07/26/2024 19:42	226204
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	07/26/2024 19:42	226204
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/26/2024 19:42	226204
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/26/2024 19:42	226204



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-019
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: G53D
Collection Date: 07/24/2024 12:38

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 16:35	226214



Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

Lab ID: 24071132-020

Client Sample ID: G54D

Matrix: GROUNDWATER

Collection Date: 07/23/2024 13:58

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		43.00	ft	1	07/23/2024 13:58	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		76	NTU	1	07/23/2024 13:58	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		-13	mV	1	07/23/2024 13:58	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		745	µS/cm	1	07/23/2024 13:58	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		18.2	°C	1	07/23/2024 13:58	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.91	mg/L	1	07/23/2024 13:58	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		6.65		1	07/23/2024 13:58	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		204	mg/L	1	07/25/2024 13:15	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	07/25/2024 13:15	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		568	mg/L	1	07/27/2024 12:12	R350897
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		212	mg/L	10	07/29/2024 20:34	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.33	mg/L	1	07/25/2024 11:25	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		21	mg/L	1	07/29/2024 20:30	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		95.2	mg/L	1	07/29/2024 12:55	226204
Magnesium	NELAP	0.0055	0.0500		29.3	mg/L	1	07/29/2024 12:55	226204
Potassium	NELAP	0.0400	0.100		1.43	mg/L	1	07/29/2024 12:55	226204
Sodium	NELAP	0.0180	0.0500		55.4	mg/L	1	07/29/2024 12:55	226204
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0008	0.0010		< 0.0010	mg/L	5	07/26/2024 19:48	226204
Arsenic	NELAP	0.0004	0.0010	J	0.0006	mg/L	5	07/26/2024 19:48	226204
Barium	NELAP	0.0007	0.0010		0.0663	mg/L	5	07/26/2024 19:48	226204
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 19:48	226204
Boron	NELAP	0.0092	0.0250		0.726	mg/L	5	07/29/2024 15:36	226204
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 19:48	226204
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	07/26/2024 19:48	226204
Cobalt	NELAP	0.0001	0.0010		0.0083	mg/L	5	07/26/2024 19:48	226204
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/29/2024 15:36	226204
Lithium	*	0.0015	0.0030	J	0.0028	mg/L	5	07/26/2024 19:48	226204
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	07/26/2024 19:48	226204
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/26/2024 19:48	226204
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/26/2024 19:48	226204



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-020
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: G54D
Collection Date: 07/23/2024 13:58

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 16:42	226214



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-021
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: SG03
Collection Date: 07/22/2024 13:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		52.58	ft	1	07/22/2024 13:00	R351002



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-022
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24

Client Sample ID: XPW01

Collection Date: 07/24/2024 11:06

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		14.72	ft	1	07/24/2024 11:06	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		12	NTU	1	07/24/2024 11:06	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		6	mV	1	07/24/2024 11:06	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		940	µS/cm	1	07/24/2024 11:06	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		18.2	°C	1	07/24/2024 11:06	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.46	mg/L	1	07/24/2024 11:06	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		8.50		1	07/24/2024 11:06	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		78	mg/L	1	07/25/2024 13:20	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		29	mg/L	1	07/25/2024 13:20	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		804	mg/L	1	07/29/2024 9:37	R350969
SW-846 9036 (TOTAL)									
Sulfate	NELAP	307	500		515	mg/L	50	07/29/2024 20:59	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.19	mg/L	1	07/25/2024 11:26	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		20	mg/L	1	07/30/2024 17:49	R351030
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		173	mg/L	1	07/29/2024 12:57	226204
Magnesium	NELAP	0.0055	0.0500		0.242	mg/L	1	07/29/2024 12:57	226204
Potassium	NELAP	0.400	1.00		41.7	mg/L	10	07/30/2024 11:17	226204
Sodium	NELAP	0.0180	0.0500		36.6	mg/L	1	07/29/2024 12:57	226204
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0008	0.0010		< 0.0010	mg/L	5	07/26/2024 19:54	226204
Arsenic	NELAP	0.0004	0.0010		0.0346	mg/L	5	07/26/2024 19:54	226204
Barium	NELAP	0.0007	0.0010		0.127	mg/L	5	07/26/2024 19:54	226204
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 19:54	226204
Boron	NELAP	0.0092	0.0250		12.7	mg/L	5	07/29/2024 15:42	226204
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 19:54	226204
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	07/26/2024 19:54	226204
Cobalt	NELAP	0.0001	0.0010	J	0.0001	mg/L	5	07/26/2024 19:54	226204
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/29/2024 15:42	226204
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	07/26/2024 19:54	226204
Molybdenum	NELAP	0.0006	0.0015		0.239	mg/L	5	07/26/2024 19:54	226204
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/26/2024 19:54	226204
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/26/2024 19:54	226204



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-022
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: XPW01
Collection Date: 07/24/2024 11:06

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 16:45	226214



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-023
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24

Client Sample ID: XPW02

Collection Date: 07/24/2024 12:04

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		3.36	ft	1	07/24/2024 12:04	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		5.4	NTU	1	07/24/2024 12:04	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		-114	mV	1	07/24/2024 12:04	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		4400	µS/cm	1	07/24/2024 12:04	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		19.5	°C	1	07/24/2024 12:04	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.22	mg/L	1	07/24/2024 12:04	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		7.96		1	07/24/2024 12:04	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		125	mg/L	1	07/25/2024 13:25	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	07/25/2024 13:25	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		3190	mg/L	1	07/29/2024 9:47	R350969
SW-846 9036 (TOTAL)									
Sulfate	NELAP	614	1000		2680	mg/L	100	07/30/2024 11:27	R350996
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.47	mg/L	1	07/25/2024 11:29	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	5	40		92	mg/L	10	07/29/2024 21:08	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		494	mg/L	1	07/29/2024 12:58	226204
Magnesium	NELAP	0.0055	0.0500		11.1	mg/L	1	07/29/2024 12:58	226204
Potassium	NELAP	0.400	1.00		29.0	mg/L	10	07/30/2024 11:18	226204
Sodium	NELAP	0.0180	0.0500		953	mg/L	1	07/29/2024 12:58	226204
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0008	0.0010	J	0.0008	mg/L	5	07/26/2024 20:01	226204
Arsenic	NELAP	0.0004	0.0010		0.0375	mg/L	5	07/26/2024 20:01	226204
Barium	NELAP	0.0007	0.0010		0.0223	mg/L	5	07/26/2024 20:01	226204
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 20:01	226204
Boron	NELAP	0.0092	0.0250		14.8	mg/L	5	07/29/2024 15:48	226204
Cadmium	*	0.0002	0.0010	J	0.0003	mg/L	5	07/26/2024 20:01	226204
Chromium	NELAP	0.0007	0.0015	J	0.0008	mg/L	5	07/26/2024 20:01	226204
Cobalt	NELAP	0.0001	0.0010	J	0.0001	mg/L	5	07/26/2024 20:01	226204
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/29/2024 15:48	226204
Lithium	*	0.0015	0.0030		0.0808	mg/L	5	07/26/2024 20:01	226204
Molybdenum	NELAP	0.0006	0.0015		0.869	mg/L	5	07/26/2024 20:01	226204
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/26/2024 20:01	226204
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/26/2024 20:01	226204



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-023
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: XPW02
Collection Date: 07/24/2024 12:04

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 16:47	226214



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-024
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24

Client Sample ID: XPW03

Collection Date: 07/24/2024 11:34

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		12.83	ft	1	07/24/2024 11:34	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		4.0	NTU	1	07/24/2024 11:34	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		-18	mV	1	07/24/2024 11:34	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		646	µS/cm	1	07/24/2024 11:34	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		19.0	°C	1	07/24/2024 11:34	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.42	mg/L	1	07/24/2024 11:34	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		10.9		1	07/24/2024 11:34	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	07/25/2024 13:30	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		84	mg/L	1	07/25/2024 13:30	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		450	mg/L	1	07/29/2024 9:48	R350969
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		148	mg/L	10	07/29/2024 21:15	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.32	mg/L	1	07/25/2024 11:31	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		23	mg/L	1	07/29/2024 21:10	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		10.6	mg/L	1	07/29/2024 13:00	226204
Magnesium	NELAP	0.0055	0.050	J	0.015	mg/L	1	07/29/2024 13:00	226204
Potassium	NELAP	0.400	1.00		26.4	mg/L	10	07/30/2024 11:20	226204
Sodium	NELAP	0.0180	0.0500		106	mg/L	1	07/29/2024 13:00	226204
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0008	0.0010		0.0139	mg/L	5	07/26/2024 20:07	226204
Arsenic	NELAP	0.0004	0.0010		0.604	mg/L	5	07/26/2024 20:07	226204
Barium	NELAP	0.0007	0.0010		0.0134	mg/L	5	07/26/2024 20:07	226204
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 20:07	226204
Boron	NELAP	0.0092	0.0250		9.10	mg/L	5	07/29/2024 15:54	226204
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 20:07	226204
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	07/26/2024 20:07	226204
Cobalt	NELAP	0.0001	0.0010		< 0.0010	mg/L	5	07/26/2024 20:07	226204
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/29/2024 15:54	226204
Lithium	*	0.0015	0.0030		0.178	mg/L	5	07/26/2024 20:07	226204
Molybdenum	NELAP	0.0006	0.0015		0.235	mg/L	5	07/26/2024 20:07	226204
Selenium	NELAP	0.0006	0.0010		0.0425	mg/L	5	07/26/2024 20:07	226204
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/26/2024 20:07	226204



Client: Ramboll

Client Project: JOP-24Q3

Lab ID: 24071132-024

Matrix: GROUNDWATER

Work Order: 24071132

Report Date: 12-Aug-24

Client Sample ID: XPW03

Collection Date: 07/24/2024 11:34

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 16:49	226214



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-025
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: XSG01
Collection Date: 07/22/2024 14:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		1.99	ft	1	07/22/2024 14:08	R351002



Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

Lab ID: 24071132-026

Client Sample ID: Field Blank

Matrix: AQUEOUS

Collection Date: 07/24/2024 13:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		1	mg/L	1	07/25/2024 13:37	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	07/25/2024 13:37	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		< 20	mg/L	1	07/29/2024 9:48	R350969
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		< 10	mg/L	1	07/29/2024 21:21	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10	J	0.05	mg/L	1	07/25/2024 11:33	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		< 4	mg/L	1	07/29/2024 21:21	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		< 0.100	mg/L	1	07/29/2024 13:01	226204
Magnesium	NELAP	0.0055	0.0500		< 0.0500	mg/L	1	07/29/2024 13:01	226204
Potassium	NELAP	0.0400	0.100		< 0.100	mg/L	1	07/29/2024 13:01	226204
Sodium	NELAP	0.0180	0.0500		< 0.0500	mg/L	1	07/29/2024 13:01	226204
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0008	0.0010		< 0.0010	mg/L	5	07/26/2024 20:13	226204
Arsenic	NELAP	0.0004	0.0010	J	0.0005	mg/L	5	07/26/2024 20:13	226204
Barium	NELAP	0.0007	0.0010		< 0.0010	mg/L	5	07/26/2024 20:13	226204
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 20:13	226204
Boron	NELAP	0.0092	0.0250		< 0.0250	mg/L	5	07/29/2024 16:40	226204
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 20:13	226204
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	07/26/2024 20:13	226204
Cobalt	NELAP	0.0001	0.0010		< 0.0010	mg/L	5	07/26/2024 20:13	226204
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/29/2024 16:40	226204
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	07/26/2024 20:13	226204
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	07/29/2024 16:40	226204
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/26/2024 20:13	226204
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/26/2024 20:13	226204
CCV recovered outside the upper control limits for B and Pb. Sample results are below the reporting limit. Data is reportable per the TNI standard.									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 16:51	226214



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071132-027
Matrix: GROUNDWATER

Work Order: 24071132
Report Date: 12-Aug-24
Client Sample ID: G52D Duplicate
Collection Date: 07/23/2024 9:26

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		25.77	ft	1	07/23/2024 9:26	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		33	NTU	1	07/23/2024 9:26	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		12	mV	1	07/23/2024 9:26	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		410	µS/cm	1	07/23/2024 9:26	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		17.9	°C	1	07/23/2024 9:26	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.95	mg/L	1	07/23/2024 9:26	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		6.74		1	07/23/2024 9:26	R351002
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		176	mg/L	1	07/25/2024 13:39	R350768
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	07/25/2024 13:39	R350768
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		298	mg/L	1	07/27/2024 12:12	R350897
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		40	mg/L	1	07/29/2024 21:23	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.30	mg/L	1	07/25/2024 11:35	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		12	mg/L	1	07/29/2024 21:24	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100	B	42.4	mg/L	1	07/25/2024 17:16	226113
Magnesium	NELAP	0.0055	0.0500		13.7	mg/L	1	07/25/2024 17:16	226113
Potassium	NELAP	0.0400	0.100		0.758	mg/L	1	07/25/2024 17:16	226113
Sodium	NELAP	0.0180	0.0500		30.5	mg/L	1	07/25/2024 17:16	226113
<i>Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.</i>									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	B	< 0.0010	mg/L	5	07/26/2024 1:08	226113
Arsenic	NELAP	0.0004	0.0010		0.0013	mg/L	5	07/26/2024 12:19	226113
Barium	NELAP	0.0007	0.0010		0.281	mg/L	5	07/26/2024 1:08	226113
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 12:19	226113
Boron	NELAP	0.0092	0.025	J	0.017	mg/L	5	07/26/2024 12:19	226113
Cadmium	*	0.0002	0.0010		< 0.0010	mg/L	5	07/26/2024 1:08	226113
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	07/26/2024 12:19	226113
Cobalt	NELAP	0.0001	0.0010		0.0040	mg/L	5	07/26/2024 1:08	226113
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/26/2024 1:08	226113
Lithium	*	0.0015	0.0030	J	0.0029	mg/L	5	07/26/2024 12:19	226113
Molybdenum	NELAP	0.0006	0.0015	J	0.0008	mg/L	5	07/26/2024 1:08	226113
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	07/26/2024 1:08	226113
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	07/26/2024 1:08	226113

Contamination present in the MBLK for Sb. Sample results below the reporting limit are reportable per the TNI Standard.



Client: Ramboll	Work Order: 24071132
Client Project: JOP-24Q3	Report Date: 12-Aug-24
Lab ID: 24071132-027	Client Sample ID: G52D Duplicate
Matrix: GROUNDWATER	Collection Date: 07/23/2024 9:26

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	07/26/2024 13:25	226132

Sample Summary

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
24071132-001	G01D	Groundwater	2	07/23/2024 9:38
24071132-002	G02D	Groundwater	2	07/23/2024 10:38
24071132-003	G03	Groundwater	2	07/23/2024 11:37
24071132-004	G05	Groundwater	2	07/24/2024 11:43
24071132-005	G06	Groundwater	2	07/24/2024 10:53
24071132-006	G07	Groundwater	2	07/24/2024 9:48
24071132-007	G08	Groundwater	2	07/24/2024 13:28
24071132-008	G09	Groundwater	2	07/23/2024 10:35
24071132-009	G10	Groundwater	2	07/24/2024 12:46
24071132-015	G11	Groundwater	2	07/23/2024 11:32
24071132-017	G51D	Groundwater	2	07/23/2024 12:35
24071132-018	G52D	Groundwater	2	07/23/2024 9:26
24071132-019	G53D	Groundwater	2	07/24/2024 12:38
24071132-020	G54D	Groundwater	2	07/23/2024 13:58
24071132-021	SG03	Groundwater	1	07/22/2024 13:00
24071132-022	XPW01	Groundwater	2	07/24/2024 11:06
24071132-023	XPW02	Groundwater	2	07/24/2024 12:04
24071132-024	XPW03	Groundwater	2	07/24/2024 11:34
24071132-025	XSG01	Groundwater	1	07/22/2024 14:08
24071132-026	Field Blank	Aqueous	2	07/24/2024 13:20
24071132-027	G52D Duplicate	Groundwater	2	07/23/2024 9:26



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll
Client Project: JOP-24Q3

Work Order: 24071132
Report Date: 12-Aug-24

STANDARD METHODS 2510 B FIELD

Batch R351002		SampType: LCS		Units μS/cm							
SampID: LCS-1-B											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field		*	0		1410	1412	0	100.1	90	110	07/23/2024

Batch R351002		SampType: LCS		Units $\mu\text{S/cm}$							
SampID: LCS-1-T											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Spec. Conductance, Field	*	0		1400	1412	0	99.5	90	110	07/23/2024	

Batch R351002		SampType: LCS		Units $\mu\text{S/cm}$							
SampID: LCS-2-B											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Spec. Conductance, Field	*	0		1420	1412	0	100.4	90	110	07/24/2024	

Batch R351002		SampType: LCS		Units μS/cm							
SampID: LCS-2-T											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Spec. Conductance, Field	*	0		1410	1412	0	100.1	90	110	07/24/2024	

SW-846 9040B FIELD

Batch R351002		SampType: LCS		Units							
SampID: LCS-1-B											Date
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
pH	*	1.00		7.00	7.000	0	100.0	98.57	101.4	07/23/2024	

Batch R351002		SampType: LCS		Units							
SampID: LCS-1-T											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
pH	*	1.00		7.08	7.000	0	101.1	98.57	101.4	07/23/2024	

Batch R351002		SampType: LCS		Units							
SampID: LCS-2-B											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
pH	*	1.00		7.01	7.000	0	100.1	98.57	101.4	07/24/2024	



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

SW-846 9040B FIELD

Batch R351002	SampType: LCS	Units								
SampID: LCS-2-T										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		7.05	7.000	0	100.7	98.57	101.4	07/24/2024

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R350897		SampType: MBLK		Units mg/L							
SampID: MBLK											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids			20		< 20	16.00	0	0	-100	100	07/27/2024

Batch R350897	SampType: LCS	Units mg/L								
SampID: LCS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		1020	1000	0	102.2	90	110	07/27/2024

Batch R350897		SampType: DUP		Units mg/L				RPD Limit 10			
SampleID: 24071132-027ADUP											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids			20		314				298.0	5.23	07/27/2024

Batch R350897		SampType: DUP		Units mg/L				RPD Limit 10			
SampleID: 24071873-001ADUP											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids			1000		15600				16600	6.21	07/27/2024

Batch R350969	SampType: MBLK	Units mg/L								
SampleID: MBLK										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	07/29/2024
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	07/29/2024

Batch R350969		SampType: LCS		Units mg/L						
SampleID: LCS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		958	1000	0	95.8	90	110	07/29/2024
Total Dissolved Solids		20		1000	1000	0	100.4	90	110	07/29/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R350969		SampType: DUP		Units mg/L					RPD Limit 10			Date Analyzed	
SampID: 24071132-024ADUP													
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Total Dissolved Solids			20		444				450.0	1.34	07/29/2024		

Batch R351152		SampType: MBLK		Units mg/L							
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	08/01/2024	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	08/01/2024	

Batch	R351152	SampType:	LCS	Units mg/L								
SampID: LCS												
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Dissolved Solids			20		978	1000	0	97.8	90	110	08/01/2024	
Total Dissolved Solids			20		968	1000	0	96.8	90	110	08/01/2024	

SW-846 9036 (TOTAL)

Batch R350922		SampType: MBLK		Units mg/L							
SampID: ICB/MBLK											Date Analyzed
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	
Sulfate			10		< 10	6.140	0	0	-100	100	
											07/29/2024

Batch R350922		SampType: LCS		Units mg/L							
SampID: ICB/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		19	20.00	0	94.1	90	110	07/29/2024	

Batch R350922		SampType: MS		Units mg/L							
SampID: 24061962-008BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		50		166	100.0	75.94	89.6	85	115	07/29/2024	

Batch	R350922	SampType:	MSD	Units mg/L					RPD Limit 10			
SampID: 24061962-008BMSD												
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate			50		164	100.0	75.94	88.3	165.5	0.75	07/29/2024	



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

SW-846 9036 (TOTAL)

Batch R350922		SampType: MS		Units mg/L							Date
SampID: 24071132-001AMS											Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		20	S	75	40.00	43.29	79.1	85	115	07/29/2024	

Batch R350922		SampType: MSD		Units mg/L							RPD Limit 10	Date
SampID: 24071132-001AMSD												Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Sulfate		20		78	40.00	43.29	86.6	74.94	3.91	07/29/2024		

Batch R350922		SampType: MS		Units mg/L							Date
SampID: 24071132-002AMS											Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		10		37	20.00	16.61	99.6	85	115	07/29/2024	

Batch R350922		SampType: MSD		Units mg/L							RPD Limit 10	Date
SampID: 24071132-002AMSD												Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Sulfate		10		36	20.00	16.61	99.2	36.52	0.22	07/29/2024		

Batch R350922		SampType: MS		Units mg/L							Date
SampID: 24071132-010AMS											Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		50		141	100.0	55.92	85.4	85	115	07/29/2024	

Batch R350922		SampType: MSD		Units mg/L							RPD Limit 10	Date
SampID: 24071132-010AMSD												Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Sulfate		50		145	100.0	55.92	89.2	141.4	2.59	07/29/2024		

Batch R350922		SampType: MS		Units mg/L							Date
SampID: 24071132-013AMS											Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		20		75	40.00	36.86	95.0	85	115	07/29/2024	

Batch R350922		SampType: MSD		Units mg/L							RPD Limit 10	Date
SampID: 24071132-013AMSD												Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Sulfate		20		74	40.00	36.86	92.2	74.84	1.49	07/29/2024		



Quality Control Results

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Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

SW-846 9036 (TOTAL)

Batch R350922		SampType: MS		Units mg/L							Date
SampID: 24072345-001AMS											Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		200		720	400.0	327.6	98.1	90	110	07/29/2024	

Batch R350922		SampType: MSD		Units mg/L							RPD Limit 10	Date
SampID: 24072345-001AMSD												Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Sulfate		200		718	400.0	327.6	97.7	720.0	0.22			07/29/2024

Batch R350922		SampType: MS		Units mg/L							Date
SampID: 24072346-001AMS											Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		200		725	400.0	351.0	93.6	90	110	07/29/2024	

Batch R350922		SampType: MSD		Units mg/L							RPD Limit 10	Date
SampID: 24072346-001AMSD												Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Sulfate		200	S	709	400.0	351.0	89.5	725.4	2.28			07/29/2024

Batch R350996		SampType: MBLK		Units mg/L							Date
SampID: ICB/MBLK											Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		10		< 10	6.140	0	0	-100	100	07/30/2024	

Batch R350996		SampType: LCS		Units mg/L							Date
SampID: ICB/LCS											Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		10		19	20.00	0	93.3	90	110	07/30/2024	

Batch R350996		SampType: MS		Units mg/L							Date
SampID: 24071292-001AMS											Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		10		34	20.00	16.11	91.2	85	115	07/30/2024	

Batch R350996		SampType: MSD		Units mg/L							RPD Limit 10	Date
SampID: 24071292-001AMSD												Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Sulfate		10		36	20.00	16.11	97.1	34.35	3.38			07/30/2024



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Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

SW-846 9036 (TOTAL)

Batch R350996		SampType: MS		Units mg/L						
SampID: 24072173-001AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		100		442	200.0	260.3	90.7	85	115	07/30/2024

Batch R350996		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 24072173-001AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate			100		452	200.0	260.3	95.7	441.8	2.24	07/30/2024

Batch R350996		SampType: MS		Units mg/L							
SampID: 24072173-006AMS											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		50		169	100.0	78.49	90.7	85	115	07/30/2024	

Batch R350996		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 24072173-006AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate			50		172	100.0	78.49	93.8	169.2	1.83	07/30/2024

SW-846 9214 (TOTAL)

Batch R350762		SampType: MBLK		Units mg/L							
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		< 0.10	0.0500	0	0	-100	100	07/25/2024	

Batch R350762		SampType: LCS		Units mg/L							
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		1.08	1.000	0	107.5	90	110	07/25/2024	

Batch R350762		SampType: MS		Units mg/L							
SampID: 24071132-002AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.25	2.000	0.1980	102.6	75	125	07/25/2024	



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Work Order: 24071132

Client Project: JOP-24Q3

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SW-846 9214 (TOTAL)

Batch R350762		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed	
SampID: 24071132-002AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Fluoride		0.10		2.33	2.000	0.1980	106.5	2.251	3.36	07/25/2024		

Batch R350762		SampType: MS		Units mg/L							
SampID: 24071132-011AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.35	2.000	0.2160	106.8	75	125	07/25/2024	

Batch R350762		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed
SampID: 24071132-011AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	
Fluoride			0.10		2.31	2.000	0.2160	104.8	2.353	1.80	07/25/2024

Batch R350762		SampType: MS		Units mg/L							
SampID: 24071132-019AMS											Date
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
Fluoride		0.10		2.88	2.000	0.7420	107.2	75	125	07/25/2024	

Batch R350762		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24071132-019AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride			0.10		2.88	2.000	0.7420	106.7	2.885	0.31	07/25/2024

Batch R350762		SampType: MS		Units mg/L							
SampID: 24071292-006AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.11	2.000	0.06500	102.1	75	125	07/25/2024	

Batch R350762		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24071292-006AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride			0.10		2.16	2.000	0.06500	104.8	2.107	2.53	07/25/2024

Batch R350762		SampType: MS		Units mg/L							
SampID: 24071292-009AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.08	2.000	0	103.8	75	125	07/25/2024	



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Work Order: 24071132

Client Project: JOP-24Q3

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SW-846 9214 (TOTAL)

Batch R350762		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed	
SampID: 24071292-009AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Fluoride		0.10		2.11	2.000	0	105.4	2.076	1.58	07/25/2024		

Batch R350762		SampType: MS		Units mg/L							
SampID: 24071895-003BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.88	2.000	0.7650	105.8	75	125	07/25/2024	

Batch R350762		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed
SampID: 24071895-003BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Fluoride		0.10		2.87	2.000	0.7650	105.3	2.882	0.38	07/25/2024	

SW-846 9251 (TOTAL)

Batch R350942		SampType: MBLK		Units mg/L							
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		< 4	0.5000	0	0	-100	100	07/29/2024	

Batch R350942		SampType: LCS		Units mg/L							
SampID: ICB/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		20	20.00	0	98.2	90	110	07/29/2024	

Batch R350942		SampType: MS		Units mg/L							
SampID: 24071132-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		33	20.00	14.64	91.7	85	115	07/29/2024	

Batch R350942		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24071132-001AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride			4		33	20.00	14.64	90.4	32.97	0.79	07/29/2024



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Client Project: JOP-24Q3

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SW-846 9251 (TOTAL)

Batch R350942		SampType: MS		Units mg/L							Date
SampID: 24071132-002AMS											Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Chloride		4		37	20.00	19.34	90.2	85	115	07/29/2024	

Batch R350942		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24071132-002AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride			4		37	20.00	19.34	88.4	37.39	0.97	07/29/2024

Batch R350942		SampType: MS		Units mg/L							Date
SampID: 24071132-013AMS											Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Chloride		8	E	123	40.00	84.65	95.8	85	115	07/29/2024	

Batch R350942		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24071132-013AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		8	E	121	40.00	84.65	91.7	123.0	1.34	07/29/2024	

Batch R350942		SampType: MS		Units mg/L							Date
SampID: 24071773-005AMS											Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Chloride		80		668	400.0	315.5	88.1	85	115	07/29/2024	

Batch R350942		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24071773-005AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride			80		676	400.0	315.5	90.0	667.9	1.16	07/29/2024

Batch R350942		SampType: MS		Units mg/L							Date
SampID: 24071875-002AMS											Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Chloride		40		363	200.0	188.6	87.3	85	115	07/29/2024	

Batch R350942		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24071875-002AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride			40		364	200.0	188.6	87.5	363.1	0.13	07/29/2024



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Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

SW-846 9251 (TOTAL)

Batch R350942		SampType: MS		Units mg/L						
SampID: 24072346-001AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		27	20.00	8.420	95.0	85	115	07/29/2024

Batch R350942		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24072346-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		27	20.00	8.420	95.2	27.41	0.15	07/29/2024	

Batch R351030		SampType: MBLK		Units mg/L							
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		< 4	0.5000	0	0	-100	100	07/30/2024	

Batch R351030		SampType: LCS		Units mg/L							
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		20	20.00	0	97.8	90	110	07/30/2024	

Batch R351030		SampType: MS		Units mg/L						
SampID: 24071132-010AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		22	20.00	2.870	97.0	85	115	07/30/2024

Batch R351030		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24071132-010AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride			4		22	20.00	2.870	96.5	22.27	0.50	07/30/2024

Batch R351030		SampType: MS		Units mg/L							
SampID: 24071292-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		36	20.00	18.52	88.0	85	115	07/30/2024	

Batch R351030		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24071292-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		37	20.00	18.52	90.0	36.12	1.07	07/30/2024	



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Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

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SW-846 9251 (TOTAL)

Batch R351030		SampType: MS		Units mg/L							
SampleID: 24072147-003BMS											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Chloride		40	E	686	200.0	486.4	100.0	85	115	07/30/2024	

Batch R351030		SampType: MSD		Units mg/L				RPD Limit 15			
SampleID: 24072147-003BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride			40	E	695	200.0	486.4	104.1	686.4	1.18	07/30/2024

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 226113		SampType: MBLK		Units mg/L						
SampleID: MBLK-226113										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	JS	0.086	0.0350	0	246.9	-100	100	07/25/2024
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	07/25/2024
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	07/25/2024
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	07/25/2024

Batch 226113		SampType: LCS		Units mg/L						
SampleID: LCS-226113										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	B	2.50	2.500	0	99.8	85	115	07/25/2024
Magnesium		0.0500		2.36	2.500	0	94.4	85	115	07/25/2024
Potassium		0.100		2.57	2.500	0	102.8	85	115	07/25/2024
Sodium		0.0500		2.46	2.500	0	98.4	85	115	07/25/2024

Batch 226204		SampType: MBLK		Units mg/L						
SampID: MBLK-226204										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	07/29/2024
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	07/29/2024
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	07/29/2024
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	07/29/2024



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Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

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SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 226204 SampType: LCS Units mg/L
SampID: LCS-226204

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		2.65	2.500	0	106.1	85	115	07/29/2024
Magnesium		0.0500		2.52	2.500	0	100.8	85	115	07/29/2024
Potassium		0.100		2.84	2.500	0	113.4	85	115	07/29/2024
Sodium		0.0500		2.63	2.500	0	105.3	85	115	07/29/2024

Batch 226204 SampType: MS Units mg/L
SampID: 24071132-011BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		12.4	2.500	9.700	106.8	75	125	07/29/2024

Batch 226204 SampType: MSD Units mg/L
SampID: 24071132-011BMSD

RPD Limit 20

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100		12.1	2.500	9.700	95.2	12.37	2.37	07/29/2024

Batch 226569 SampType: MBLK Units mg/L
SampID: MBLK-226569

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0500		< 0.0500	0.0068	0	0	-100	100	08/05/2024
Arsenic		0.0250		< 0.0250	0.0087	0	0	-100	100	08/05/2024
Barium		0.0025		< 0.0025	0.0007	0	0	-100	100	08/05/2024
Beryllium		0.0005		< 0.0005	0.0002	0	0	-100	100	08/05/2024
Boron		0.0200		< 0.0200	0.0090	0	0	-100	100	08/05/2024
Cadmium		0.0020		< 0.0020	0.0005	0	0	-100	100	08/05/2024
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	08/05/2024
Chromium		0.0050		< 0.0050	0.0028	0	0	-100	100	08/05/2024
Cobalt		0.0050		< 0.0050	0.0020	0	0	-100	100	08/05/2024
Lead		0.0150		< 0.0150	0.0014	0	0	-100	100	08/05/2024
Lithium		0.0500		< 0.0500	0.0019	0	0	-100	100	08/05/2024
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	08/05/2024
Molybdenum		0.0100		< 0.0100	0.0037	0	0	-100	100	08/05/2024
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	08/05/2024
Selenium		0.0400		< 0.0400	0.0170	0	0	-100	100	08/05/2024
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	08/05/2024
Thallium		0.0500		< 0.0500	0.0111	0	0	-100	100	08/05/2024



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Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 226569 SampType: LCS Units mg/L

SampID: LCS-226569

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0500		0.564	0.5000	0	112.7	85	115	08/05/2024
Arsenic		0.0250		0.557	0.5000	0	111.3	85	115	08/05/2024
Barium		0.0025		2.21	2.000	0	110.5	85	115	08/05/2024
Beryllium		0.0005		0.0572	0.0500	0	114.4	85	115	08/05/2024
Boron		0.0200		0.539	0.5000	0	107.8	85	115	08/05/2024
Cadmium		0.0020		0.0565	0.0500	0	113.0	85	115	08/05/2024
Calcium		0.100		2.76	2.500	0	110.5	85	115	08/05/2024
Chromium		0.0050		0.225	0.2000	0	112.4	85	115	08/05/2024
Cobalt		0.0050		0.535	0.5000	0	107.1	85	115	08/06/2024
Lead		0.0150		0.563	0.5000	0	112.7	85	115	08/05/2024
Lithium		0.0500		0.544	0.5000	0	108.7	85	115	08/05/2024
Magnesium		0.0500		2.60	2.500	0	104.1	85	115	08/05/2024
Molybdenum		0.0100		0.545	0.5000	0	109.1	85	115	08/05/2024
Potassium		0.100		2.76	2.500	0	110.3	85	115	08/05/2024
Selenium		0.0400		0.565	0.5000	0	112.9	85	115	08/05/2024
Sodium		0.0500		2.75	2.500	0	110.2	85	115	08/05/2024
Thallium		0.0500		0.279	0.2500	0	111.6	85	115	08/05/2024

Batch 226569 SampType: MS Units mg/L

SampID: 24071451-035CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	61.9	2.500	56.00	234.8	75	125	08/05/2024
Magnesium		0.050	S	31.2	2.500	26.92	169.2	75	125	08/05/2024
Potassium		0.100		3.38	2.500	0.5302	114.1	75	125	08/05/2024
Sodium		0.050	S	68.5	2.500	63.24	209.2	75	125	08/05/2024

Batch 226569 SampType: MSD Units mg/L

RPD Limit 20

SampID: 24071451-035CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100	S	60.3	2.500	56.00	172.4	61.87	2.55	08/05/2024
Magnesium		0.050	S	30.2	2.500	26.92	132.2	31.15	3.02	08/05/2024
Potassium		0.100		3.29	2.500	0.5302	110.4	3.384	2.79	08/05/2024
Sodium		0.050	S	66.6	2.500	63.24	136.0	68.47	2.71	08/05/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch	226569	SampType:	MSD	Units				mg/L	RPD Limit			20
SampID: 24080007-001FMSD												
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Arsenic			0.0250		0.569	0.5000	0	113.7	0.5489	3.53	08/05/2024	
Barium			0.0025		2.35	2.000	0.1302	111.0	2.240	4.79	08/05/2024	
Beryllium			0.0005		0.0580	0.0500	0	116.0	0.05550	4.41	08/05/2024	
Boron			0.0200		0.754	0.5000	0.1984	111.1	0.7218	4.32	08/05/2024	
Cadmium			0.0020		0.0555	0.0500	0	111.0	0.05300	4.61	08/05/2024	
Chromium			0.0050		0.229	0.2000	0	114.5	0.2192	4.37	08/05/2024	
Cobalt			0.0050		0.581	0.5000	0	116.2	0.5586	3.93	08/05/2024	
Lead			0.0150		0.557	0.5000	0	111.3	0.5358	3.83	08/05/2024	
Selenium			0.0400		0.560	0.5000	0	112.1	0.5461	2.58	08/05/2024	

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch	226113	SampType:	MBLK	Units mg/L						
SampleID: MBLK-226113										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	07/26/2024
Antimony		0.0010	S	0.0011	0.0004	0	248.5	-100	100	07/25/2024
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	07/25/2024
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	07/25/2024
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	07/25/2024
Boron	*	0.0250		< 0.0250	0.0093	0	0	-100	100	07/25/2024
Cadmium	*	0.0010		< 0.0010	0.0001	0	0	-100	100	07/25/2024
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	07/25/2024
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	07/25/2024
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	07/25/2024
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	07/25/2024
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	07/25/2024
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	07/25/2024
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	07/25/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 226113 SampType: LCS Units mg/L

SampID: LCS-226113

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010	B	0.547	0.5000	0	109.3	85	115	07/25/2024
Arsenic		0.0010		0.515	0.5000	0	102.9	85	115	07/25/2024
Barium		0.0010		2.11	2.000	0	105.4	85	115	07/25/2024
Beryllium		0.0010		0.0486	0.0500	0	97.1	85	115	07/25/2024
Boron	*	0.0250		0.516	0.5000	0	103.2	85	115	07/25/2024
Cadmium	*	0.0010		0.0504	0.0500	0	100.7	85	115	07/25/2024
Chromium		0.0015		0.211	0.2000	0	105.6	85	115	07/25/2024
Cobalt		0.0010		0.506	0.5000	0	101.2	85	115	07/25/2024
Lead		0.0010	E	0.505	0.5000	0	101.0	85	115	07/25/2024
Lithium	*	0.0030		0.515	0.5000	0	103.0	85	115	07/25/2024
Molybdenum		0.0015		0.462	0.5000	0	92.4	85	115	07/25/2024
Selenium		0.0010		0.539	0.5000	0	107.9	85	115	07/25/2024
Thallium		0.0020		0.237	0.2500	0	94.9	85	115	07/25/2024

Batch 226204 SampType: MBLK Units mg/L

SampID: MBLK-226204

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	07/26/2024
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	07/26/2024
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	07/26/2024
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	07/26/2024
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	07/29/2024
Cadmium	*	0.0010		< 0.0010	0.0001	0	0	-100	100	07/26/2024
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	07/26/2024
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	07/26/2024
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	07/29/2024
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	07/26/2024
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	07/26/2024
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	07/26/2024
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	07/26/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 226204 SampType: LCS Units mg/L

SampID: LCS-226204

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.556	0.5000	0	111.1	80	120	07/26/2024
Arsenic		0.0010		0.562	0.5000	0	112.4	80	120	07/26/2024
Barium		0.0010		2.19	2.000	0	109.5	80	120	07/26/2024
Beryllium		0.0010		0.0528	0.0500	0	105.6	80	120	07/26/2024
Boron		0.0250		0.514	0.5000	0	102.8	80	120	07/29/2024
Cadmium	*	0.0010		0.0541	0.0500	0	108.2	80	120	07/26/2024
Chromium		0.0015		0.219	0.2000	0	109.7	80	120	07/26/2024
Cobalt		0.0010		0.562	0.5000	0	112.3	80	120	07/26/2024
Lead		0.0010		0.567	0.5000	0	113.4	80	120	07/29/2024
Lithium	*	0.0030		0.534	0.5000	0	106.9	80	120	07/26/2024
Molybdenum		0.0015		0.508	0.5000	0	101.5	80	120	07/26/2024
Selenium		0.0010		0.569	0.5000	0	113.7	80	120	07/26/2024
Thallium		0.0020		0.264	0.2500	0	105.5	80	120	07/26/2024

Batch 226204 SampType: MS Units mg/L

SampID: 24071132-011BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Boron		0.0250		0.575	0.5000	0	115.1	75	125	07/29/2024

Batch 226204 SampType: MSD Units mg/L

RPD Limit 20

SampID: 24071132-011BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Boron		0.0250		0.604	0.5000	0	120.7	0.5753	4.81	07/29/2024

Batch 226569 SampType: MS Units mg/L

SampID: 24080007-001FMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.544	0.5000	0	108.8	75	125	08/06/2024
Thallium		0.0020		0.206	0.2500	0	82.5	75	125	08/06/2024

Batch 226569 SampType: MSD Units mg/L

RPD Limit 20

SampID: 24080007-001FMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		0.550	0.5000	0	110.0	0.5440	1.09	08/06/2024
Thallium		0.0020		0.217	0.2500	0	86.8	0.2062	5.13	08/06/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll
Client Project: JOP-24Q3

Work Order: 24071132
Report Date: 12-Aug-24

SW-846 7470A (TOTAL)

Batch 226132		SampType: MBLK		Units mg/L							
SampID: MBLK-226132											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		< 0.00020	0.0001	0	0	-100	100	07/29/2024	
Mercury		0.00020		< 0.00020	0.0001	0	0	-100	100	07/26/2024	

Batch 226132		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-226132											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Mercury		0.00020		0.00469	0.0050	0	93.8	85	115	07/26/2024	
Mercury		0.00020		0.00561	0.0050	0	112.1	85	115	07/29/2024	

Batch 226132		SampType: MS		Units mg/L						
SampID: 24071862-001BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00557	0.0050	0	111.5	75	125	07/29/2024

Batch 226132		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24071862-001BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		0.00551	0.0050	0	110.2	0.005574	1.19	07/29/2024	

Batch 226132		SampType: MS		Units mg/L						
SampID: 24071896-003DMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00507	0.0050	0	101.4	75	125	07/26/2024

Batch 226132		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24071896-003DMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		0.00514	0.0050	0	102.8	0.005069	1.35	07/26/2024	

Batch 226214		SampType: MBLK		Units mg/L							
SampID: MBLK-226214											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		< 0.00020	0.0001	0	0	-100	100	07/26/2024	
Mercury		0.00020		< 0.00020	0.0001	0	0	-100	100	07/29/2024	



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

SW-846 7470A (TOTAL)

Batch 226214 SampType: LCS Units mg/L

SampleID: LCS-226214

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00569	0.0050	0	113.8	85	115	07/29/2024
Mercury		0.00020		0.00477	0.0050	0	95.3	85	115	07/26/2024

Batch 226214 SampType: MS Units mg/L

SampleID: 24071132-009BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00471	0.0050	0	94.2	75	125	07/26/2024

Batch 226214 SampType: MSD Units mg/L

RPD Limit 15

SampleID: 24071132-009BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		0.00472	0.0050	0	94.4	0.004712	0.14	07/26/2024

Batch 226214 SampType: MS Units mg/L

SampleID: 24072081-003DMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00524	0.0050	0	104.8	75	125	07/26/2024

Batch 226214 SampType: MSD Units mg/L

RPD Limit 15

SampleID: 24072081-003DMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		0.00529	0.0050	0	105.8	0.005240	0.93	07/26/2024



Receiving Check List

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071132

Client Project: JOP-24Q3

Report Date: 12-Aug-24

Carrier: Daniel Crump

Received By: AMD

Completed by:

On:

23-Jul-24

Amber Dilallo

Amber Dilallo

Reviewed by:

On:

25-Jul-24

Ellie Hopkins

Ellie Hopkins

Pages to follow:

Chain of custody

4

Extra pages included

0

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C **6.9**

Type of thermal preservation?

None ☐

Ice ☒

Blue Ice ☐

Dry Ice ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☐

No ☒

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☒

Lab ☐

NA ☐

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water – at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☐

No ☒

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

Any No responses must be detailed below or on the COC.

Samples were received on 7/23/24 at 1615 on ice [6.9C - LTG5]. pH strip #96651. G111 was submitted/received rather than G11 per Brett Gillihan. - amberdilallo - 7/23/2024 4:54:15 PM

Samples were received on 7/24/2024 at 17:20 on ice [2.7C - LTG#5]. - pschultz - 7/25/2024 8:32:52 AM

pH strip #96651. - pschultz - 7/25/2024 8:34:15 AM

Additional Nitric Acid (98584) was needed in G107 upon arrival at the laboratory. - NO/pschultz - 7/25/2024 8:34:21 AM

G11 was collected/submitted on 7/24/24 rather than G109. Collection date and time listed on the COC for G109 will be reported for G11. - PS 7/25/2024

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Page: 1 of 2

ITEM #	Section D Required Client Information		Valid Matrix Codes		COLLECTED		SAMPLE TEMP AT COLLECTION		# OF CONTAINERS		Preservatives										Analysis Test#	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	Project No./ Lab I.D.
	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE		MATRIX	(see valid codes to left)	DATE	TIME	WT	G	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		JOP_257_401	JOP_257_402	JOP_845_401													
1	G01D		WT	G	7-23-24	938			2	1	1							X	X													24071132-001	
2	G02D		WT	G	7-23-24	1038			2	1	1							X	X													24071132-002	
3	G03		WT	G	7-23-24	1137			2	1	1							X	X													24071132-003	
4	G05		WT	G					2	1	1							X	X													24071132-004	
5	G06		WT	G					2	1	1							X	X													24071132-005	
6	G07		WT	G					2	1	1							X	X													24071132-006	
7	G08		WT	G					2	1	1							X	X													24071132-007	
8	G09		WT	G	7-23-24	1035			2	1	1							X	X													24071132-008	
9	G10		WT	G					2	1	1							X	X													24071132-009	
10	G101		WT	G	7-23-24	1219			2	1	1								X													24071132-010	
11	G102		WT	G					2	1	1								X													24071132-011	
12	G105		WT	G					2	1	1								X													24071132-012	
13	G107		WT	G					2	1	1								X													24071132-013	
14	G109		WT	G	7-23-24	1217			2	1	1								X													24071132-014	
15	G11		WT	G	7-23-24	1130 TE*			2	1	1							X	X													24071132-015	
16	G111		WT	G	7/23/24	1132 Gm			2	1	1							X														24071132-016	

ADDITIONAL COMMENTS

JOP-24Q3 Rev 0

RELINQUISHED BY / AFFILIATION

211 CD

DATE

7-23

TIME

1615

ACCEPTED BY / AFFILIATION

Umao Ojalla

DATE

*per Brett Gillman. Jms
7/24/24

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Inact (Y/N)
PRINT Name of SAMPLER: Daniel Crump					
SIGNATURE of SAMPLER: [Signature]	DATE Signed (MM/DD/YY): 7-23/1400				

Confidential

PHN 9665

24 July 24

LTG 5
on ice

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 2

[illegible]

Confidential

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 2

* Gill was sampled, not G109.
PS 7125

phr 90081
Added HNO₃ (98584) to G107 NO 7/25

CHAIN-OF-CUSTODY / Analytical Request Document

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24071132

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 2 of 2	
Company: Vistra Corp-Joppa		Report To: Brian Voelker		Attention: Brian Voelker		REGULATORY AGENCY NPDES GROUND WATER DRINKING WATER UST RCRA OTHER Site Location: IL STATE:	
Address: 2100 Portland Road		Copy To: Sam Davies; samantha.davies@vistracorp.com		Company Name: Vistra Corp			
Joppa, IL 62953		Roger Faughn roger.faughn@vistracorp.com		Address: see Section A			
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:			
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:			
Requested Due Date/TAT: 10 day		Project Number:		Profile #:			

ITEM #	Section D Required Client Information SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Matrix Codes		MATRIX	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test#	Requested Analysis Filtered (Y/N)												Residual Chlorine (Y/N)	Project No./ Lab I.D.			
		DRINKING WATER	WATER						WASTE WATER	PRODUCT	SOIL/SOLID	UNPRESERVED	H ₂ SO ₄	HNO ₃	HCl	NaOH		Na ₂ S ₂ O ₃	Methanol	Other														
		WT	WT						P	SL	QL	WP	AR	OT	IS																			
1	G51D	WT	G		7-24-24	1239		2	1									X												24071132-017				
2	G52D	WT	G		7-24-24	1358		2	1									X												24071132-018				
3	G53D	WT	G		7-24-24	1358		2	1									X												24071132-019				
4	G54D	WT	G		7-24-24	1358		2	1									X												24071132-020				
5	SG03	WT	G		7-24-24	1106		0										X	X	X										24071132-021				
6	XPW01	WT	G		7-24-24	1134		2	1									X		X										24071132-022				
7	XPW02	WT	G		7-24-24	1204		2	1									X		X										24071132-023				
8	XPW03	WT	G		7-24-24	1204		2	1									X		X										24071132-024				
9	XSG01	WT	G		7-24-24	1320		0										X		X										24071132-025				
10	Field Blank	WT	G		7-24-24	1320		2	1									X	X	X										24071132-026				
11	G52D Duplicate	WT	G					2	1									X		X										24071132-027				
12																																		
13																																		
14																																		
15																																		
16																																		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
JOP-24Q3 Rev 0	Tracy Carroll	7-24-24	1720	Paul Ziegler	7-24-24	1720	Y	Z		
SAMPLER NAME AND SIGNATURE							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Tracy Carroll										
SIGNATURE of SAMPLER: Tracy Carroll										
DATE Signed (MM/DD/YY): 7-24-24										

August 26, 2024

Eric Bauer
Ramboll
234 W. Florida Street
Fifth Floor
Milwaukee, WI 53204
TEL: (414) 837-3607
FAX: (414) 837-3608



Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: JOP-24Q3

WorkOrder: 24071133

Dear Eric Bauer:

TEKLAB, INC received 16 samples on 7/24/2024 5:20:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Elizabeth A. Hurley
Director of Customer Service
(618)344-1004 ex 33
ehurley@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071133

Client Project: JOP-24Q3

Report Date: 26-Aug-24

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Sample Summary	23
Receiving Check List	24
Chain of Custody	Appended



Definitions

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071133

Client Project: JOP-24Q3

Report Date: 26-Aug-24

Abbr Definition

* Analytes on report marked with an asterisk are not NELAP accredited

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.

DNI Did not ignite

DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

TNTC Too numerous to count (> 200 CFU)



Definitions

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071133

Client Project: JOP-24Q3

Report Date: 26-Aug-24

Qualifiers

# - Unknown hydrocarbon	B - Analyte detected in associated Method Blank
C - RL shown is a Client Requested Quantitation Limit	E - Value above quantitation range
H - Holding times exceeded	I - Associated internal standard was outside method criteria
J - Analyte detected below quantitation limits	M - Manual Integration used to determine area response
ND - Not Detected at the Reporting Limit	R - RPD outside accepted recovery limits
S - Spike Recovery outside recovery limits	T - TIC(Tentatively identified compound)
X - Value exceeds Maximum Contaminant Level	



Case Narrative

<http://www.teklabinc.com/>

Client: Ramboll
Client Project: JOP-24Q3

Work Order: 24071133
Report Date: 26-Aug-24

Cooler Receipt Temp: 6.9 °C

An employee of Teklab, Inc. collected the sample(s).

G11 and G53D collection times per field data file. EAH 8/26/24

Ra226/228 analysis was performed by Eurofins St. Louis. See attached report for results and QC.

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com



Accreditations

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071133

Client Project: JOP-24Q3

Report Date: 26-Aug-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Illinois	IEPA	1004652024-2	NELAP	4/30/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2025	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2025	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2025	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2025	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2026	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Mississippi	MSDH			4/30/2025	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071133-001
Matrix: GROUNDWATER

Work Order: 24071133
Report Date: 26-Aug-24
Client Sample ID: G01D
Collection Date: 07/23/2024 9:38

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	08/13/2024 11:54	R352283



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071133-002
Matrix: GROUNDWATER

Work Order: 24071133
Report Date: 26-Aug-24
Client Sample ID: G02D
Collection Date: 07/23/2024 10:38

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	08/13/2024 11:54	R352283



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071133-003
Matrix: GROUNDWATER

Work Order: 24071133
Report Date: 26-Aug-24
Client Sample ID: G03
Collection Date: 07/23/2024 11:37

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	08/13/2024 11:55	R352283



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071133-004
Matrix: GROUNDWATER

Work Order: 24071133
Report Date: 26-Aug-24
Client Sample ID: G05
Collection Date: 07/24/2024 11:43

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	08/13/2024 11:59	R352283



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071133-005
Matrix: GROUNDWATER

Work Order: 24071133
Report Date: 26-Aug-24
Client Sample ID: G06
Collection Date: 07/24/2024 10:53

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	08/13/2024 11:59	R352283



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071133-006
Matrix: GROUNDWATER

Work Order: 24071133
Report Date: 26-Aug-24
Client Sample ID: G07
Collection Date: 07/24/2024 9:48

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	08/13/2024 11:59	R352283



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071133-007
Matrix: GROUNDWATER

Work Order: 24071133
Report Date: 26-Aug-24
Client Sample ID: G08
Collection Date: 07/24/2024 13:28

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	08/13/2024 11:59	R352283



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071133-008
Matrix: GROUNDWATER

Work Order: 24071133
Report Date: 26-Aug-24
Client Sample ID: G09
Collection Date: 07/23/2024 10:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	08/13/2024 12:01	R352283



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071133-009
Matrix: GROUNDWATER

Work Order: 24071133
Report Date: 26-Aug-24
Client Sample ID: G10
Collection Date: 07/24/2024 12:46

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	08/13/2024 12:01	R352283



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071133-010
Matrix: GROUNDWATER

Work Order: 24071133
Report Date: 26-Aug-24
Client Sample ID: G11
Collection Date: 07/23/2024 11:32

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	08/13/2024 12:01	R352283



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071133-011
Matrix: GROUNDWATER

Work Order: 24071133
Report Date: 26-Aug-24
Client Sample ID: G51D
Collection Date: 07/23/2024 12:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	08/13/2024 12:03	R352283



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071133-012
Matrix: GROUNDWATER

Work Order: 24071133
Report Date: 26-Aug-24
Client Sample ID: G52D
Collection Date: 07/23/2024 9:26

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	08/13/2024 12:03	R352283



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071133-013
Matrix: GROUNDWATER

Work Order: 24071133
Report Date: 26-Aug-24
Client Sample ID: G53D
Collection Date: 07/24/2024 12:38

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	08/13/2024 12:03	R352283



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071133-014
Matrix: GROUNDWATER

Work Order: 24071133
Report Date: 26-Aug-24
Client Sample ID: G54D
Collection Date: 07/23/2024 13:58

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	08/13/2024 12:04	R352283



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071133-015
Matrix: AQUEOUS

Work Order: 24071133
Report Date: 26-Aug-24
Client Sample ID: Field Blank
Collection Date: 07/24/2024 13:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	08/13/2024 12:04	R352283



Client: Ramboll
Client Project: JOP-24Q3
Lab ID: 24071133-016
Matrix: GROUNDWATER

Work Order: 24071133
Report Date: 26-Aug-24
Client Sample ID: G52D Duplicate
Collection Date: 07/23/2024 9:26

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	08/13/2024 12:04	R352283

Sample Summary

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071133

Client Project: JOP-24Q3

Report Date: 26-Aug-24

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
24071133-001	G01D	Groundwater	1	07/23/2024 9:38
24071133-002	G02D	Groundwater	1	07/23/2024 10:38
24071133-003	G03	Groundwater	1	07/23/2024 11:37
24071133-004	G05	Groundwater	1	07/24/2024 11:43
24071133-005	G06	Groundwater	1	07/24/2024 10:53
24071133-006	G07	Groundwater	1	07/24/2024 9:48
24071133-007	G08	Groundwater	1	07/24/2024 13:28
24071133-008	G09	Groundwater	1	07/23/2024 10:35
24071133-009	G10	Groundwater	1	07/24/2024 12:46
24071133-010	G11	Groundwater	1	07/23/2024 11:32
24071133-011	G51D	Groundwater	1	07/23/2024 12:35
24071133-012	G52D	Groundwater	1	07/23/2024 9:26
24071133-013	G53D	Groundwater	1	07/24/2024 12:38
24071133-014	G54D	Groundwater	1	07/23/2024 13:58
24071133-015	Field Blank	Aqueous	1	07/24/2024 13:20
24071133-016	G52D Duplicate	Groundwater	1	07/23/2024 9:26



Receiving Check List

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24071133

Client Project: JOP-24Q3

Report Date: 26-Aug-24

Carrier: Daniel Crump

Received By: AMD

Completed by:

On:

23-Jul-24

Amber Dilallo

Amber Dilallo

Reviewed by:

On:

25-Jul-24

Ellie Hopkins

Ellie Hopkins

Pages to follow:

Chain of custody

4

Extra pages included

26

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C 6.9

Type of thermal preservation?

None ☐

Ice ☒

Blue Ice ☐

Dry Ice ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☐

No ☒

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☐

Lab ☐

NA ☒

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water - at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☐

No ☒

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

Any No responses must be detailed below or on the COC.

Samples were received on 7/23/24 at 1615 on ice [6.9C - LTG5]. pH strip #96651. G111 was submitted/received rather than G11 per Brett Gillihan. - amberdilallo - 7/23/2024 4:54:15 PM

Samples were received on 7/24/2024 at 17:20 on ice [2.7C - LTG#5]. - pschultz - 7/25/2024 8:40:01 AM

pH strip #96651. - pschultz - 7/25/2024 8:40:36 AM

Additional Nitric Acid (98584) was needed in G10 upon arrival at the laboratory. - pschultz - 7/25/2024 8:40:45 AM

G11 was collected/submitted on 7/24/24 rather than G109. Collection date and time listed on the COC for G109 will be reported for G11. - PS 7/25/2024

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 2

ITEM #	Section D Required Client Information	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Matrix Code DRINKING WATER DW WATER WW WASTE WATER P PRODUCT SOLID SL OIL WIP AR WIFE QT AIR TS OTHER	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test#	Requested Analysis Filtered (Y/N)										Radium 226/228, only		
						DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol		Other	JOP_257_401	JOP_257_402	JOP_845_401	Residual Chlorine (Y/N)	Project No./ Lab I.D.							
1		G01D		WT	G	7-23-24	438		2		2								X	X									24071133-001	
2		G02D		WT	G	7-23-24	1058		2		2								X	X									24071133-002	
3		G03		WT	G	7-23-24	1137		2		2								X	X									24071133-003	
4		G05		WT	G				2		2								X	X									24071133-004	
5		G06		WT	G				2		2								X	X									24071133-005	
6		G07		WT	G				2		2								X	X									24071133-006	
7		G08		WT	G				2		2								X	X									24071133-007	
8		G09		WT	G	7-23-24	1035		2		2								X	X									24071133-008	
9		G10		WT	G				2		2								X	X									24071133-009	
10		G101		WT	G	7-23-24	1319		0											X									N/A	
11		G102		WT	G				0											X									N/A	
12		G105		WT	G				0											X									N/A	
13		G107		WT	G				0											X									N/A	
14		G109		WT	G	7-23-24	1217		0											X									N/A	
15		G11		WT	G	7-23-24	H32 TE*		2		2								X		X								24071133-010	
16		G111		WT	G	7/23/24	1132 um		0											X									N/A	
ADDITIONAL COMMENTS				RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION				DATE		TIME		SAMPLE CONDITIONS												
JOP-24Q3 Rev 0				SIS		7/23/24		1615		Union Oil Co				7/23/24		1615		69 Y N V												

*per Brett Gillinan. um
7/23/24

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples intact (Y/N)
PRINT Name of SAMPLER: Daniel Crump					
SIGNATURE of SAMPLER: [Signature]	DATE Signed (MM/DD/YY): 7-23/1400				

UG5 on ice

PH 9665

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Daniel Crompton					
SIGNATURE of SAMPLER: [Signature]	DATE Signed (MM/DD/YY): 7-23/1400				

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

24071133 JOP-257-401

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 1 of 2	
Company: Vistra Corp-Joppa		Report To: Brian Voelker		Attention: Brian Voelker		REGULATORY AGENCY NPDES GROUND WATER DRINKING WATER UST RCRA OTHER Site Location: IL STATE:	
Address: 2100 Portland Road		Copy To: Sam Davies: samantha.davies@vistracorp.com		Company Name: Vistra Corp			
Joppa, IL 62953		Roger Faughn: roger.faughn@vistracorp.com		Address: see Section A			
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:			
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:			
Requested Due Date/TAT: 10 day		Project Number:		Profile #:			

ITEM #	Section D Required Client Information	Valid Matrix Codes DRINKING WATER DW WATER WW WASTE WATER P PRODUCT SOL/SOLID SL OIL WP WIPE AR AIR TS OTHER	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test	Requested Analysis Filtered (Y/N)												Radium 226/228, only	Residual Chlorine (Y/N)	Project No./ Lab I.D.		
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		JOP_257_401	JOP_257_402	JOP_845_401														
1	G01D		WT	G				2									X	X														24071133-001		
2	G02D		WT	G	7-24-24	1418		2									X	X													24071133-002			
3	G03		WT	G				2									X	X													24071133-003			
4	G05		WT	G	7-24-24	1143		2									X	X													24071133-004			
5	G06		WT	G	7-24-24	1053		2									X	X													24071133-005			
6	G07		WT	G	7-24-24	948		2									X	X													24071133-006			
7	G08		WT	G	7-24-24	1328		2									X	X													24071133-007			
8	G09		WT	G				2									X	X													24071133-008			
9	G10		WT	G	7-24-24	1246		2									X	X													24071133-009			
10	G101		WT	G				0										X													N/A			
11	G102		WT	G	7-23-24	1418		0										X													N/A			
12	G105		WT	G	7-24-24	902		0										X													N/A			
13	G107		WT	G	7-24-24	940		0										X													N/A			
14	G109 *		WT	G	7-24-24	1034		0										X													N/A			
15	G11 *		WT	G				2									X	X													24071133-010			
16	G111		WT	G				0										X													N/A			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
JOP-24Q3 Rev 0	Tracy Carrick	7-24-24	1720	Paul [Signature]	7-24-24	1720	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
							7.7	>	Z	

PH/966SI *G11 was sampled, not G109.

SAMPLER NAME AND SIGNATURE		DATE Signed (MM/DD/YY): 7-24-24	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Tracy Carrick	SIGNATURE of SAMPLER: Tracy Carrick					

Added HNO₃ (98584) to G10

BS 7/25

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

[illegible]

Confidential

ANALYTICAL REPORT

PREPARED FOR

Attn: Elizabeth A Hurley
TekLab, Inc
5445 Horseshoe Lake Road
Collinsville, Illinois 62234

Generated 8/26/2024 3:10:42 PM Revision 1

JOB DESCRIPTION

Radium-226 and Radium-228
24071133

JOB NUMBER

160-54869-1

Job Notes

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

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

Authorization



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Revision 1

Authorized for release by
Erika Jordan, Project Manager
erika.jordan@et.eurofinsus.com
(314)298-8566

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Client: TekLab, Inc
Project: Radium-226 and Radium-228

Job ID: 160-54869-1

Job ID: 160-54869-1

Eurofins St. Louis

CASE NARRATIVE

Client: TekLab, Inc

Project: 24071133

Report Number: 160-54869-1 Revision 1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition, all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method.

Eurofins Environment Testing attests to the validity of the laboratory data generated by Eurofins facilities reported herein. All analyses performed by Eurofins Environment Testing facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins Environment Testing's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

Calculations are performed before rounding to avoid round-off errors in calculated results.

Proper preservation was noted for the methods performed on these samples, unless otherwise detailed below.

All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client.

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

The matrix for the Method Blank and LCS/LCSD is as close to the samples as can be reasonably achieved. Detailed information can be found in the most current revision of the associated SOP.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

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

Revision

The report being provided is a revision of the original report sent on 8/26/2024. The report (revision 1) is being revised in order to correct collection times for samples 24071133-010 and 24071133-013 that were inaccurate on the original chain-of-custody (COC). The email request is included with the revised report.

Receipt

The samples were received on 7/30/2024 11:13 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved. The temperatures of the 2 coolers at receipt time were 21.9°C and 22.2°C.

Method 903.0 - Radium-226 (GFPC)

Samples 24071133-001 (160-54869-1), 24071133-002 (160-54869-2), 24071133-003 (160-54869-3), 24071133-004 (160-54869-4), 24071133-005 (160-54869-5), 24071133-006 (160-54869-6), 24071133-007 (160-54869-7), 24071133-008 (160-54869-8), 24071133-009 (160-54869-9), 24071133-010 (160-54869-10), 24071133-011 (160-54869-11), 24071133-012 (160-54869-12), 24071133-013 (160-54869-13), 24071133-014 (160-54869-14), 24071133-015 (160-54869-15) and 24071133-016 (160-54869-16) were analyzed for Radium-226 (GFPC). The samples were prepared on 8/1/2024 and analyzed on 8/23/2024.

Eurofins St. Louis

Client: TekLab, Inc
Project: Radium-226 and Radium-228

Job ID: 160-54869-1

Job ID: 160-54869-1 (Continued)

Eurofins St. Louis

Method 904.0 - Radium-228 (GFPC)

Samples 24071133-001 (160-54869-1), 24071133-002 (160-54869-2), 24071133-003 (160-54869-3), 24071133-004 (160-54869-4), 24071133-005 (160-54869-5), 24071133-006 (160-54869-6), 24071133-007 (160-54869-7), 24071133-008 (160-54869-8), 24071133-009 (160-54869-9), 24071133-010 (160-54869-10), 24071133-011 (160-54869-11), 24071133-012 (160-54869-12), 24071133-013 (160-54869-13), 24071133-014 (160-54869-14), 24071133-015 (160-54869-15) and 24071133-016 (160-54869-16) were analyzed for Radium-228 (GFPC). The samples were prepared on 8/1/2024 and analyzed on 8/13/2024.

The Radium-228 laboratory control sample (LCS) recovered at 130%. The limits in our LIMS system at (125%) reflect the requirements of a regulatory agency that represents a large amount of our work. However, the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of (145%). The LCS is within criteria and no further action is required.

The detection goal was not met for the following samples due to a reduction of the sample size attributed to high residual mass: 24071133-003 (160-54869-3), 24071133-005 (160-54869-5), 24071133-006 (160-54869-6) and 24071133-008 (160-54869-8). Analytical results are reported with the detection limit achieved.

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

Samples 24071133-001 (160-54869-1), 24071133-002 (160-54869-2), 24071133-003 (160-54869-3), 24071133-004 (160-54869-4), 24071133-005 (160-54869-5), 24071133-006 (160-54869-6), 24071133-007 (160-54869-7), 24071133-008 (160-54869-8), 24071133-009 (160-54869-9), 24071133-010 (160-54869-10), 24071133-011 (160-54869-11), 24071133-012 (160-54869-12), 24071133-013 (160-54869-13), 24071133-014 (160-54869-14), 24071133-015 (160-54869-15) and 24071133-016 (160-54869-16) were analyzed for Combined Radium-226 and Radium-228. The samples were analyzed on 8/26/2024.

Eurofins St. Louis

TEKLAB, INC. Chain of Custody

5445 Horseshoe Lake Road, Collinsville, IL 62234 Phone (618) 344-1004 Fax (618) 344-1005

Are the samples chilled? YES ☐ NO ☒ With: ☐ Ice ☐ Blue Ice ☐ Preserved in: ☐ Lab ☐ Field

Teklab Inc

5445 Horseshoe Lake Road
Collinsville, IL 62234Cooler Temp: Sampler: QC Level:

Project#

24071133

Contact:

Elizabeth Hurley

Email:

EHurley@TekLabInc.com

Requested Due Date:

Standard TAT

Billing/PO:

36669

Phone:

(618) 344-1004 ext. 33

Comments: **Please issue reports and invoices via email only**

Please analyze for Radium 226/228 per methods specified for Vistra/Ramboll projects.

Method changes require Teklab authorization. Samples collected from an IL site.

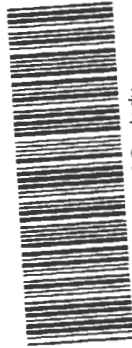
Batch QC is required for all analyses requested. Vistra-EDD requested.

PLEASE NOTE:

NELAP accreditation is required on the requested analytes and must be documented as such on the final report. If your laboratory does not currently hold a NELAP accreditation for the requested method and/or analytes, please contact Teklab immediately. If your laboratory loses accreditation or is suspended for any analytic method during the life of the contract, you must contact Teklab immediately.

Ra226/228

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix
	24071133-001	7/23/24 0938	HNO3	Groundwater
	24071133-002	7/23/24 1038	HNO3	Groundwater
	24071133-003	7/23/24 1137	HNO3	Groundwater
	24071133-004	7/24/24 1143	HNO3	Groundwater
	24071133-005	7/24/24 1053	HNO3	Groundwater
	24071133-006	7/24/24 0948	HNO3	Groundwater
	24071133-007	7/24/24 1328	HNO3	Groundwater
	24071133-008	7/23/24 1035	HNO3	Groundwater
	24071133-009	7/24/24 1246	HNO3	Groundwater
	24071133-010	7/24/24 1034	HNO3	Groundwater
	24071133-011	7/23/24 1235	HNO3	Groundwater



160-54869 Chain of Custody

*Relinquished By

Date/Time

7/25/24 10831

Received By

Date/Time

7/30/24 0831

7/30/24 1113

Teklab maintains a strict policy of client confidentiality and as such does not provide client/sampler information without proper authorization and proprietary rights. Teklab, Inc. protects clients' confidential information as directed by local, state or federal laws. (Teklab QAM Section 9.1, TNI V1 M2 Section 4.1.5 c)

SubDoc Rev'd
3/2/2016

TEKLAB, INC. Chain of Custody

5445 Horseshoe Lake Road, Collinsville, IL 62234 Phone (618) 344-1004 Fax (618) 344-1005

Are the samples chilled? YES ☐ NO ☒ With: ☐ Ice ☐ Blue Ice ☐ Preserved in: ☐ Lab ☐ Field

Teklab Inc5445 Horseshoe Lake Road
Collinsville, IL 62234Cooler Temp: Sampler: QC Level: Comments: **Please issue reports and invoices via email only**

Please analyze for Radium 226/228 per methods specified for Vistra/Ramboll projects.

Method changes require Teklab authorization. Samples collected from an IL site.

Batch QC is required for all analyses requested. Vistra-EDD requested.

Project# 24071133

Contact:

Elizabeth Hurley

Email:

EHurley@TekLabInc.com

Requested Due Date:

Standard TAT

Billing/PO:

36669

Phone: (618) 344-1004 ext. 33

PLEASE NOTE:

NELAP accreditation is required on the requested analytes and must be documented as such on the final report. If your laboratory does not currently hold a NELAP accreditation for the requested method and/or analytes, please contact Teklab immediately. If your laboratory loses accreditation or is suspended for any analyte method during the life of the contract, you must contact Teklab immediately.

Ra226/228

✓

✓

✓

✓

✓

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix
	24071133-012	7/23/24 0926	HNO3	Groundwater
	24071133-013	7/24/24 1239	HNO3	Groundwater
	24071133-014	7/23/24 1358	HNO3	Groundwater
	24071133-015	7/24/24 1320	HNO3	Aqueous
	24071133-016	7/23/24 0926	HNO3	Groundwater
			HNO3	Groundwater
			HNO3	Groundwater
			HNO3	Groundwater
			HNO3	Groundwater
			HNO3	Groundwater
			HNO3	Groundwater

Relinquished By	Date/Time	Received By	Date/Time
<i>[Signature]</i>	7/25/24 1831	<i>[Signature]</i>	7/25/24 1033
<i>[Signature]</i>	7/30/24 1113	<i>[Signature]</i>	7/30/24 1113

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SubCofRevA
3/2/2016

Erika Jordan

From: Elizabeth A. Hurley <EHurley@TekLabInc.com>
Sent: Monday, August 26, 2024 1:41 PM
To: Erika Jordan
Subject: RE: Eurofins TestAmerica invoice, EDD and report files from 160-54869-1 Radium-226 and Radium-228

Unverified Sender: The sender of this email has not been verified. Review the content of the message carefully and verify the identity of the sender before acting on this email: replying, opening attachments or clicking links.

Hi, Erika,

May I request another revision? Please update 24071133-010 collection date/time to 7/23/24 1132 and 24071133-013 collection date/time to 7/24/24 1238 to align with the field data file.

Thanks!

Have a great day!

Elizabeth Hurley
Director of Customer Service



Teklab, Inc.
5445 Horseshoe Lake Road
Collinsville, IL 62234
Phone: (618) 344-1004 Ext. 33
Cell: (618) 791-8119
Fax: (618) 344-1005
E-mail: ehurley@teklabinc.com
www.teklabinc.com

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From: Erika Jordan <TALS@reports.et.eurofinsus.com>
Sent: Monday, August 26, 2024 11:36 AM
To: Elizabeth A. Hurley <EHurley@TekLabInc.com>
Subject: Eurofins TestAmerica invoice, EDD and report files from 160-54869-1 Radium-226 and Radium-228

Good morning!

Attached please find the invoice, EDD and report files for job 160-54869-1; Radium-226 and Radium-228

The samples were received on 7/30/2024 11:13 AM.

Please feel free to contact me if you have any questions.

Thank you and have a great day!

Erika Jordan
Project Manager

Eurofins St. Louis

E-mail: erika.jordan@et.eurofinsus.com
www.eurofinsus.com/env



Reference: [160-303891]
Attachments: 4

> > Bank information has changed, please refer to remittance information on invoice. < <

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Login Sample Receipt Checklist

Client: TekLab, Inc

Job Number: 160-54869-1

SDG Number: 24071133

Login Number: 54869

List Number: 1

Creator: Worthington, Sierra M

List Source: Eurofins St. Louis

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

Definitions/Glossary

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-54869-1
SDG: 24071133

Qualifiers

Rad

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-54869-1
SDG: 24071133

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

Protocol References:

EPA = US Environmental Protection Agency
None = None
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-54869-1
SDG: 24071133

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-54869-1	24071133-001	Water	07/23/24 09:38	07/30/24 11:13
160-54869-2	24071133-002	Water	07/23/24 10:38	07/30/24 11:13
160-54869-3	24071133-003	Water	07/23/24 11:37	07/30/24 11:13
160-54869-4	24071133-004	Water	07/24/24 11:43	07/30/24 11:13
160-54869-5	24071133-005	Water	07/24/24 10:53	07/30/24 11:13
160-54869-6	24071133-006	Water	07/24/24 09:48	07/30/24 11:13
160-54869-7	24071133-007	Water	07/24/24 13:28	07/30/24 11:13
160-54869-8	24071133-008	Water	07/23/24 10:35	07/30/24 11:13
160-54869-9	24071133-009	Water	07/24/24 12:46	07/30/24 11:13
160-54869-10	24071133-010	Water	07/23/24 11:32	07/30/24 11:13
160-54869-11	24071133-011	Water	07/23/24 12:35	07/30/24 11:13
160-54869-12	24071133-012	Water	07/23/24 09:26	07/30/24 11:13
160-54869-13	24071133-013	Water	07/24/24 12:38	07/30/24 11:13
160-54869-14	24071133-014	Water	07/23/24 13:58	07/30/24 11:13
160-54869-15	24071133-015	Water	07/24/24 13:20	07/30/24 11:13
160-54869-16	24071133-016	Water	07/23/24 09:26	07/30/24 11:13

Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-54869-1
SDG: 24071133

Client Sample ID: 24071133-001

Lab Sample ID: 160-54869-1

Date Collected: 07/23/24 09:38

Matrix: Water

Date Received: 07/30/24 11:13

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.311		0.132	0.135	1.00	0.138	pCi/L	08/01/24 09:54	08/23/24 08:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.6		30 - 110					08/01/24 09:54	08/23/24 08:00	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.179	U	0.430	0.431	1.00	0.849	pCi/L	08/01/24 10:02	08/13/24 11:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.6		30 - 110					08/01/24 10:02	08/13/24 11:54	1
Y Carrier	83.4		30 - 110					08/01/24 10:02	08/13/24 11:54	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.311	U	0.450	0.452	5.00	0.849	pCi/L		08/26/24 10:09	1

Client Sample ID: 24071133-002

Lab Sample ID: 160-54869-2

Date Collected: 07/23/24 10:38

Matrix: Water

Date Received: 07/30/24 11:13

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.395		0.114	0.120	1.00	0.0884	pCi/L	08/01/24 09:54	08/23/24 08:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		30 - 110					08/01/24 09:54	08/23/24 08:00	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.359	U	0.319	0.321	1.00	0.500	pCi/L	08/01/24 10:02	08/13/24 11:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		30 - 110					08/01/24 10:02	08/13/24 11:54	1
Y Carrier	81.5		30 - 110					08/01/24 10:02	08/13/24 11:54	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.755		0.339	0.343	5.00	0.500	pCi/L		08/26/24 10:09	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-54869-1
SDG: 24071133

Client Sample ID: 24071133-003

Lab Sample ID: 160-54869-3

Date Collected: 07/23/24 11:37

Matrix: Water

Date Received: 07/30/24 11:13

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.409		0.237	0.240	1.00	0.293	pCi/L	08/01/24 09:54	08/23/24 08:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	53.8		30 - 110					08/01/24 09:54	08/23/24 08:00	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.886	U G	1.12	1.12	1.00	1.86	pCi/L	08/01/24 10:02	08/13/24 11:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	53.8		30 - 110					08/01/24 10:02	08/13/24 11:55	1
Y Carrier	83.4		30 - 110					08/01/24 10:02	08/13/24 11:55	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.30	U	1.14	1.15	5.00	1.86	pCi/L		08/26/24 10:09	1

Client Sample ID: 24071133-004

Lab Sample ID: 160-54869-4

Date Collected: 07/24/24 11:43

Matrix: Water

Date Received: 07/30/24 11:13

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.461		0.132	0.138	1.00	0.121	pCi/L	08/01/24 09:54	08/23/24 08:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		30 - 110					08/01/24 09:54	08/23/24 08:00	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.532	U	0.363	0.366	1.00	0.545	pCi/L	08/01/24 10:02	08/13/24 11:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		30 - 110					08/01/24 10:02	08/13/24 11:59	1
Y Carrier	83.0		30 - 110					08/01/24 10:02	08/13/24 11:59	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.993		0.386	0.391	5.00	0.545	pCi/L		08/26/24 10:09	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-54869-1
SDG: 24071133

Client Sample ID: 24071133-005

Lab Sample ID: 160-54869-5

Date Collected: 07/24/24 10:53

Matrix: Water

Date Received: 07/30/24 11:13

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.458		0.242	0.245	1.00	0.286	pCi/L	08/01/24 09:54	08/23/24 08:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	55.8		30 - 110					08/01/24 09:54	08/23/24 08:00	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.626	U G	0.897	0.899	1.00	1.51	pCi/L	08/01/24 10:02	08/13/24 11:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	55.8		30 - 110					08/01/24 10:02	08/13/24 11:59	1
Y Carrier	89.3		30 - 110					08/01/24 10:02	08/13/24 11:59	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.08	U	0.929	0.932	5.00	1.51	pCi/L		08/26/24 10:09	1

Client Sample ID: 24071133-006

Lab Sample ID: 160-54869-6

Date Collected: 07/24/24 09:48

Matrix: Water

Date Received: 07/30/24 11:13

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.390		0.238	0.241	1.00	0.325	pCi/L	08/01/24 09:54	08/23/24 08:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	65.1		30 - 110					08/01/24 09:54	08/23/24 08:03	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.00603	U G	0.606	0.606	1.00	1.18	pCi/L	08/01/24 10:02	08/13/24 11:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	65.1		30 - 110					08/01/24 10:02	08/13/24 11:59	1
Y Carrier	83.7		30 - 110					08/01/24 10:02	08/13/24 11:59	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.396	U	0.651	0.652	5.00	1.18	pCi/L		08/26/24 10:09	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-54869-1
SDG: 24071133

Client Sample ID: 24071133-007

Lab Sample ID: 160-54869-7

Date Collected: 07/24/24 13:28

Matrix: Water

Date Received: 07/30/24 11:13

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.192		0.105	0.106	1.00	0.128	pCi/L	08/01/24 09:54	08/23/24 08:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		30 - 110					08/01/24 09:54	08/23/24 08:03	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.322	U	0.443	0.444	1.00	0.742	pCi/L	08/01/24 10:02	08/13/24 11:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		30 - 110					08/01/24 10:02	08/13/24 11:59	1
Y Carrier	83.4		30 - 110					08/01/24 10:02	08/13/24 11:59	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.514	U	0.455	0.456	5.00	0.742	pCi/L		08/26/24 10:09	1

Client Sample ID: 24071133-008

Lab Sample ID: 160-54869-8

Date Collected: 07/23/24 10:35

Matrix: Water

Date Received: 07/30/24 11:13

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.292		0.190	0.191	1.00	0.252	pCi/L	08/01/24 09:54	08/23/24 08:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	69.5		30 - 110					08/01/24 09:54	08/23/24 08:03	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.241	U G	0.794	0.794	1.00	1.42	pCi/L	08/01/24 10:02	08/13/24 12:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	69.5		30 - 110					08/01/24 10:02	08/13/24 12:01	1
Y Carrier	84.1		30 - 110					08/01/24 10:02	08/13/24 12:01	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.533	U	0.816	0.817	5.00	1.42	pCi/L		08/26/24 10:09	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-54869-1
SDG: 24071133

Client Sample ID: 24071133-009

Lab Sample ID: 160-54869-9

Date Collected: 07/24/24 12:46

Matrix: Water

Date Received: 07/30/24 11:13

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.449		0.147	0.153	1.00	0.129	pCi/L	08/01/24 09:54	08/23/24 08:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.7		30 - 110					08/01/24 09:54	08/23/24 08:03	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.652	U	0.506	0.509	1.00	0.782	pCi/L	08/01/24 10:02	08/13/24 12:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.7		30 - 110					08/01/24 10:02	08/13/24 12:01	1
Y Carrier	84.1		30 - 110					08/01/24 10:02	08/13/24 12:01	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.10		0.527	0.531	5.00	0.782	pCi/L		08/26/24 10:09	1

Client Sample ID: 24071133-010

Lab Sample ID: 160-54869-10

Date Collected: 07/23/24 11:32

Matrix: Water

Date Received: 07/30/24 11:13

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.156		0.0847	0.0858	1.00	0.103	pCi/L	08/01/24 09:54	08/23/24 08:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		30 - 110					08/01/24 09:54	08/23/24 08:03	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.270	U	0.342	0.343	1.00	0.569	pCi/L	08/01/24 10:02	08/13/24 12:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		30 - 110					08/01/24 10:02	08/13/24 12:01	1
Y Carrier	79.6		30 - 110					08/01/24 10:02	08/13/24 12:01	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.426	U	0.352	0.354	5.00	0.569	pCi/L		08/26/24 10:09	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-54869-1
SDG: 24071133

Client Sample ID: 24071133-011

Lab Sample ID: 160-54869-11

Date Collected: 07/23/24 12:35

Matrix: Water

Date Received: 07/30/24 11:13

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.199		0.116	0.117	1.00	0.145	pCi/L	08/01/24 09:54	08/23/24 08:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.1		30 - 110					08/01/24 09:54	08/23/24 08:03	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.476	U	0.527	0.529	1.00	0.860	pCi/L	08/01/24 10:02	08/13/24 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.1		30 - 110					08/01/24 10:02	08/13/24 12:03	1
Y Carrier	75.9		30 - 110					08/01/24 10:02	08/13/24 12:03	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.676	U	0.540	0.542	5.00	0.860	pCi/L		08/26/24 10:09	1

Client Sample ID: 24071133-012

Lab Sample ID: 160-54869-12

Date Collected: 07/23/24 09:26

Matrix: Water

Date Received: 07/30/24 11:13

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.429		0.142	0.147	1.00	0.153	pCi/L	08/01/24 09:54	08/23/24 08:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.3		30 - 110					08/01/24 09:54	08/23/24 08:04	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.823		0.398	0.405	1.00	0.544	pCi/L	08/01/24 10:02	08/13/24 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.3		30 - 110					08/01/24 10:02	08/13/24 12:03	1
Y Carrier	92.3		30 - 110					08/01/24 10:02	08/13/24 12:03	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.25		0.423	0.431	5.00	0.544	pCi/L		08/26/24 10:09	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-54869-1
SDG: 24071133

Client Sample ID: 24071133-013

Lab Sample ID: 160-54869-13

Date Collected: 07/24/24 12:38

Matrix: Water

Date Received: 07/30/24 11:13

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.180		0.108	0.109	1.00	0.148	pCi/L	08/01/24 09:54	08/23/24 08:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		30 - 110					08/01/24 09:54	08/23/24 08:04	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.166	U	0.330	0.330	1.00	0.653	pCi/L	08/01/24 10:02	08/13/24 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		30 - 110					08/01/24 10:02	08/13/24 12:03	1
Y Carrier	82.6		30 - 110					08/01/24 10:02	08/13/24 12:03	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.180	U	0.347	0.348	5.00	0.653	pCi/L		08/26/24 10:09	1

Client Sample ID: 24071133-014

Lab Sample ID: 160-54869-14

Date Collected: 07/23/24 13:58

Matrix: Water

Date Received: 07/30/24 11:13

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0588	U	0.0708	0.0710	1.00	0.116	pCi/L	08/01/24 09:54	08/23/24 08:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		30 - 110					08/01/24 09:54	08/23/24 08:20	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.389	U	0.353	0.354	1.00	0.559	pCi/L	08/01/24 10:02	08/13/24 12:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		30 - 110					08/01/24 10:02	08/13/24 12:04	1
Y Carrier	80.4		30 - 110					08/01/24 10:02	08/13/24 12:04	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.447	U	0.360	0.361	5.00	0.559	pCi/L		08/26/24 10:09	1

Eurofins St. Louis

Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-54869-1
SDG: 24071133

Client Sample ID: 24071133-015

Lab Sample ID: 160-54869-15

Date Collected: 07/24/24 13:20

Matrix: Water

Date Received: 07/30/24 11:13

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0150	U	0.0531	0.0531	1.00	0.101	pCi/L	08/01/24 09:54	08/23/24 08:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		30 - 110					08/01/24 09:54	08/23/24 08:20	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0776	U	0.269	0.269	1.00	0.522	pCi/L	08/01/24 10:02	08/13/24 12:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		30 - 110					08/01/24 10:02	08/13/24 12:04	1
Y Carrier	84.9		30 - 110					08/01/24 10:02	08/13/24 12:04	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.0150	U	0.274	0.274	5.00	0.522	pCi/L		08/26/24 10:09	1

Client Sample ID: 24071133-016

Lab Sample ID: 160-54869-16

Date Collected: 07/23/24 09:26

Matrix: Water

Date Received: 07/30/24 11:13

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.470		0.133	0.140	1.00	0.121	pCi/L	08/01/24 09:54	08/23/24 08:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					08/01/24 09:54	08/23/24 08:20	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.05		0.416	0.427	1.00	0.520	pCi/L	08/01/24 10:02	08/13/24 12:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					08/01/24 10:02	08/13/24 12:04	1
Y Carrier	83.7		30 - 110					08/01/24 10:02	08/13/24 12:04	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.52		0.437	0.449	5.00	0.520	pCi/L		08/26/24 10:09	1

Eurofins St. Louis

QC Sample Results

APPENDIX A.

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Job ID: 160-54869-1
SDG: 24071133

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-673426/1-B
Matrix: Water
Analysis Batch: 676455

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 673426

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.07810	U	0.0811	0.0814	1.00	0.130	pCi/L	08/01/24 09:54	08/23/24 07:58	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		30 - 110					08/01/24 09:54	08/23/24 07:58	1

Lab Sample ID: LCS 160-673426/2-A
Matrix: Water
Analysis Batch: 676455

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 673426

Analyte		Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226		9.58	10.72		1.12	1.00	0.0924	pCi/L	112	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits							
Ba Carrier	87.5		30 - 110							

Lab Sample ID: 160-54869-2 DU
Matrix: Water
Analysis Batch: 676455

Client Sample ID: 24071133-002
Prep Type: Total/NA
Prep Batch: 673426

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.395		0.4345		0.127	1.00	0.0824	pCi/L	0.16	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	89.7		30 - 110							

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-673427/1-A
Matrix: Water
Analysis Batch: 674892

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 673427

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.01422	U	0.285	0.285	1.00	0.537	pCi/L	08/01/24 10:02	08/13/24 11:48	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		30 - 110					08/01/24 10:02	08/13/24 11:48	1
Y Carrier	77.4		30 - 110					08/01/24 10:02	08/13/24 11:48	1

Eurofins St. Louis

QC Sample Results

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Job ID: 160-54869-1
SDG: 24071133

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-673427/2-A
Matrix: Water
Analysis Batch: 674892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 673427

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	8.68	11.26		1.47	1.00	0.516	pCi/L	130	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	87.5		30 - 110
Y Carrier	81.9		30 - 110

Lab Sample ID: 160-54869-2 DU
Matrix: Water
Analysis Batch: 674894

Client Sample ID: 24071133-002
Prep Type: Total/NA
Prep Batch: 673427

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.359	U	0.3883	U	0.350	1.00	0.549	pCi/L	0.04	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	89.7		30 - 110
Y Carrier	80.0		30 - 110

QC Association Summary

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
LOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-54869-1
SDG: 24071133

Rad

Prep Batch: 673426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-54869-1	24071133-001	Total/NA	Water	PrecSep-21	
160-54869-2	24071133-002	Total/NA	Water	PrecSep-21	
160-54869-3	24071133-003	Total/NA	Water	PrecSep-21	
160-54869-4	24071133-004	Total/NA	Water	PrecSep-21	
160-54869-5	24071133-005	Total/NA	Water	PrecSep-21	
160-54869-6	24071133-006	Total/NA	Water	PrecSep-21	
160-54869-7	24071133-007	Total/NA	Water	PrecSep-21	
160-54869-8	24071133-008	Total/NA	Water	PrecSep-21	
160-54869-9	24071133-009	Total/NA	Water	PrecSep-21	
160-54869-10	24071133-010	Total/NA	Water	PrecSep-21	
160-54869-11	24071133-011	Total/NA	Water	PrecSep-21	
160-54869-12	24071133-012	Total/NA	Water	PrecSep-21	
160-54869-13	24071133-013	Total/NA	Water	PrecSep-21	
160-54869-14	24071133-014	Total/NA	Water	PrecSep-21	
160-54869-15	24071133-015	Total/NA	Water	PrecSep-21	
160-54869-16	24071133-016	Total/NA	Water	PrecSep-21	
MB 160-673426/1-B	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-673426/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
160-54869-2 DU	24071133-002	Total/NA	Water	PrecSep-21	

Prep Batch: 673427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-54869-1	24071133-001	Total/NA	Water	PrecSep_0	
160-54869-2	24071133-002	Total/NA	Water	PrecSep_0	
160-54869-3	24071133-003	Total/NA	Water	PrecSep_0	
160-54869-4	24071133-004	Total/NA	Water	PrecSep_0	
160-54869-5	24071133-005	Total/NA	Water	PrecSep_0	
160-54869-6	24071133-006	Total/NA	Water	PrecSep_0	
160-54869-7	24071133-007	Total/NA	Water	PrecSep_0	
160-54869-8	24071133-008	Total/NA	Water	PrecSep_0	
160-54869-9	24071133-009	Total/NA	Water	PrecSep_0	
160-54869-10	24071133-010	Total/NA	Water	PrecSep_0	
160-54869-11	24071133-011	Total/NA	Water	PrecSep_0	
160-54869-12	24071133-012	Total/NA	Water	PrecSep_0	
160-54869-13	24071133-013	Total/NA	Water	PrecSep_0	
160-54869-14	24071133-014	Total/NA	Water	PrecSep_0	
160-54869-15	24071133-015	Total/NA	Water	PrecSep_0	
160-54869-16	24071133-016	Total/NA	Water	PrecSep_0	
MB 160-673427/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-673427/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
160-54869-2 DU	24071133-002	Total/NA	Water	PrecSep_0	

Tracer/Carrier Summary

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-54869-1
SDG: 24071133

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
160-54869-1	24071133-001	79.6	
160-54869-2	24071133-002	91.9	
160-54869-2 DU	24071133-002	89.7	
160-54869-3	24071133-003	53.8	
160-54869-4	24071133-004	89.2	
160-54869-5	24071133-005	55.8	
160-54869-6	24071133-006	65.1	
160-54869-7	24071133-007	93.4	
160-54869-8	24071133-008	69.5	
160-54869-9	24071133-009	87.7	
160-54869-10	24071133-010	87.2	
160-54869-11	24071133-011	79.1	
160-54869-12	24071133-012	80.3	
160-54869-13	24071133-013	85.0	
160-54869-14	24071133-014	91.9	
160-54869-15	24071133-015	97.1	
160-54869-16	24071133-016	87.0	
LCS 160-673426/2-A	Lab Control Sample	87.5	
MB 160-673426/1-B	Method Blank	91.2	

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
160-54869-1	24071133-001	79.6	83.4
160-54869-2	24071133-002	91.9	81.5
160-54869-2 DU	24071133-002	89.7	80.0
160-54869-3	24071133-003	53.8	83.4
160-54869-4	24071133-004	89.2	83.0
160-54869-5	24071133-005	55.8	89.3
160-54869-6	24071133-006	65.1	83.7
160-54869-7	24071133-007	93.4	83.4
160-54869-8	24071133-008	69.5	84.1
160-54869-9	24071133-009	87.7	84.1
160-54869-10	24071133-010	87.2	79.6
160-54869-11	24071133-011	79.1	75.9
160-54869-12	24071133-012	80.3	92.3
160-54869-13	24071133-013	85.0	82.6
160-54869-14	24071133-014	91.9	80.4
160-54869-15	24071133-015	97.1	84.9
160-54869-16	24071133-016	87.0	83.7
LCS 160-673427/2-A	Lab Control Sample	87.5	81.9
MB 160-673427/1-A	Method Blank	91.2	77.4

Tracer/Carrier Legend

Ba = Ba Carrier

Eurofins St. Louis

Tracer/Carrier Summary

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228
Y = Y Carrier

Job ID: 160-54869-1
SDG: 24071133

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Site Sampling Event: JOP- 24Q3

Groundwater Sampling Summary

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

WO Sample	Well ID	Program/ Sample Type	Weather				Well Condition				
			Temp (°F)	Precipitation	Wind Direction	Sky	Well Pad	Casing	Protective Cover	Reference Mark/ ID	Well Locked
001	G01D	Groundwater Sample	76.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
002	G02D	Groundwater Sample	76.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
003	G03	Groundwater Sample	76.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
004	G05	Groundwater Sample	77.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
005	G06	Groundwater Sample	77.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
006	G07	Groundwater Sample	75.0	None	N	Cloudy	Good	Good	Good	Yes	Yes
007	G08	Groundwater Sample	78.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
008	G09	Groundwater Sample	79.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
009	G10	Groundwater Sample	84.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
010	G101	Groundwater Sample	83.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
011	G102	Groundwater Sample	83.0	None	N	Cloudy	Good	Good	Good	Yes	Yes
012	G105	Groundwater Sample	76.0	None	N	Cloudy	Good	Good	Good	Yes	Yes
013	G107	Groundwater Sample	78.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
014	G109	Groundwater Sample	82.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
015	G11	Groundwater Sample	81.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
016	G111	Groundwater Sample	79.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
017	G51D	Groundwater Sample	76.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
018	G52D	Groundwater Sample	76.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
019	G53D	Groundwater Sample	78.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
020	G54D	Groundwater Sample	76.0	Light	N	Cloudy	Good	Good	Good	Yes	Yes
021	SG03	DTW Only	82.0	None	NW	Partly cloudy					
022	XPW01	Leachate Sample	81.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
023	XPW02	Leachate Sample	82.0	None	N	Clear	Good	Good	Good	Yes	Yes
024	XPW03	Leachate Sample	81.0	None	N	Clear	Good	Good	Good	Yes	Yes
025	XSG01	DTW Only	82.0	None	NW	Partly cloudy					
026	Field Blank	QA/QC Sample	82.0	None	N	Clear					
027	G52D Duplicate	QA/QC Sample	76.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Summary

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

WO Sample	Well ID	GW Level Measurement				Purge Activities							
		Sampler Initials	Date/Time	DTW (ft)	DTB (ft)	Sampler Initials	Purge Date	Purge Start Time	Purge End Time	Purging/Sampling Device	Well Diameter (in)	Actual Volume Purged (L)	Purge Rate (mL/min)
001	G01D	TAC	7/23/24 8:53	42.90	67.10	TAC	7/23/2024	09:03	09:38	Bladder Pump	2"	6.5	185.7
002	G02D	TAC	7/23/24 10:17	43.22	75.20	TAC	7/23/2024	10:17	10:38	Bladder Pump	2"	4.0	190.5
003	G03	TAC	7/23/24 11:15	38.22	68.03	TAC	7/23/2024	11:15	11:37	Bladder Pump	2"	5.0	227.3
004	G05	TAC	7/24/24 11:16	43.27	62.92	TAC	7/24/2024	11:16	11:43	Bladder Pump	2"	5.0	185.2
005	G06	TAC	7/24/24 10:10	40.42	62.76	TAC	7/24/2024	10:10	10:53	Bladder Pump	2"	10.0	232.6
006	G07	TAC	7/24/24 8:32	40.55	87.64	TAC	7/24/2024	09:19	09:48	Bladder Pump	2"	9.0	310.3
007	G08	TAC	7/24/24 13:06	32.83	86.82	TAC	7/24/2024	13:06	13:28	Bladder Pump	2"	4.5	204.5
008	G09	BG	7/23/24 9:57	40.61	72.51	BG	7/23/2024	09:57	10:35	Bladder Pump	2"	4.5	118.4
009	G10	BG	7/24/24 12:14	41.03	73.04	BG	7/24/2024	12:24	12:46	Bladder Pump	2"	8.0	363.6
010	G101	BG	7/23/24 12:30	45.89	58.00	BG	7/23/2024	12:30	13:19	Bladder Pump	2"	6.0	122.4
011	G102	BG	7/23/24 13:47	57.51	70.70	BG	7/23/2024	13:47	14:18	Bladder Pump	2"	7.0	225.8
012	G105	BG	7/24/24 8:37	55.48	70.90	BG	7/24/2024	08:37	09:02	Bladder Pump	2"	4.5	180.0
013	G107	BG	7/24/24 9:13	54.42	71.00	BG	7/24/2024	09:13	09:40	Submersible Pump	2"	8.0	296.3
014	G109	BG	7/23/24 11:44	50.51	68.50	BG	7.23.24	11:44	12:17	Bladder Pump	2"	5.0	151.5
015	G11	BG	7/23/24 11:04	49.24	68.90	BG	7/23/2024	11:04	11:32	Bladder Pump	2"	6.0	214.3
016	G111	BG	7/24/24 10:10	47.65	70.90	BG	7/24/2024	10:10	10:34	Bladder Pump	2"	3.5	145.8
017	G51D	TAC	7/23/24 12:05	44.19	62.70	TAC	7/23/2024	12:05	12:35	Bladder Pump	2"	5.3	175.0
018	G52D	BG	7/23/24 8:57	25.77	82.50	BG	7/23/2024	08:57	09:26	Bladder Pump	2"	5.0	172.4
019	G53D	TAC	7/24/24 12:11	37.09	60.60	TAC	7/24/2024	12:11	12:38	Bladder Pump	2"	5.0	185.2
020	G54D	TAC	7/23/24 13:33	43.00	83.50	TAC	7/23/2024	13:34	13:58	Bladder Pump	2"	5.0	208.3
021	SG03	BG	7/22/24 13:00	52.58	-								
022	XPW01	BG	7/24/24 10:48	14.72	56.31	BG	7/24/2024	10:48	11:06	Bladder Pump	2"	3.5	194.4
023	XPW02	BG	7/24/24 11:50	3.36	32.52	BG	7/24/2024	11:50	12:04	Bladder Pump	2"	3.0	214.3
024	XPW03	BG	7/24/24 11:19	12.83	39.57	BG	7/24/2024	11:19	11:34	Bladder Pump	2"	3.0	200.0
025	XSG01	BG	7/22/24 14:08	1.99	-								
026	Field Blank		-	-	-								
027	G52D Duplicate	BG	7/23/24 8:57	25.77	82.50	BG	7/23/2024	08:57	09:26	Bladder Pump	2"	5.0	172.4

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Summary

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

WO Sample	Well ID	Sampling Activities and Observations										
		Sampler Initials	Date	Time	Sampling Method	Instrument ID	Field Filtered	Appearance	Odor	Color	Post-Sample DTW (ft)	Drawdown (ft)
001	G01D	TAC	07/23/24	09:38	Low Flow	218083	No	Clear	None	None	43.20	0.30
002	G02D	TAC	07/23/24	10:38	Low Flow	218083	No	Clear	None	None	43.25	0.03
003	G03	TAC	07/23/24	11:37	Low Flow	218083	No	Clear	None	LT Rust	38.22	0.00
004	G05	TAC	07/24/24	11:43	Low Flow	218083	No	Clear	None	None	45.88	2.61
005	G06	TAC	07/24/24	10:53	Low Flow	218083	No	Clear	None	lt brown	40.52	0.10
006	G07	TAC	07/24/24	09:48	Low Flow	218083	No	Slightly cloudy	None	None	40.55	0.00
007	G08	TAC	07/24/24	13:28	Low Flow	218083	No	Clear	None	None	32.94	0.11
008	G09	BG	07/23/24	10:35	Low Flow	45720	No	Slightly cloudy	None	Lt Brown	41.32	0.71
009	G10	BG	07/24/24	12:46	Low Flow	45720	No	Slightly cloudy	Slight	Lt Brown	41.98	0.95
010	G101	BG	07/23/24	13:19	Low Flow	45720	No	Cloudy	None	Lt Brown	46.21	0.32
011	G102	BG	07/23/24	14:18	Low Flow	45720	No	Cloudy	None	none	58.10	0.59
012	G105	BG	07/24/24	09:02	Low Flow	45720	No	Clear	None	CLEAR	56.32	0.84
013	G107	BG	07/24/24	09:40	Low Flow	45720	No	Cloudy	None	Lt Brown	56.12	1.70
014	G109	BG	07/23/24	12:17	Low Flow	45720	No	Slightly cloudy	None	none	51.97	1.46
015	G11	BG	07/23/24	11:32	Low Flow	45720	No	Slightly cloudy	None	none	49.61	0.37
016	G111	BG	07/24/24	10:34	Low Flow	45720	No	Clear	None	CLEAR	47.98	0.33
017	G51D	TAC	07/23/24	12:35	Low Flow	218083	No	Clear	None	None	44.40	0.21
018	G52D	BG	07/23/24	09:26	Low Flow	45720	No	Clear	None	clear	26.17	0.40
019	G53D	TAC	07/24/24	12:39	Low Flow	218083	No	Clear	None	None	37.15	0.06
020	G54D	TAC	07/23/24	13:58	Low Flow	218083	No	Clear	None	None	43.06	0.06
021	SG03											
022	XPW01	BG	07/24/24	11:06	Low Flow	45720	No	Clear	None	CLEAR	15.02	0.30
023	XPW02	BG	07/24/24	12:04	Low Flow	45720	No	Clear	Slight	CLEAR	3.99	0.63
024	XPW03	BG	07/24/24	11:34	Low Flow	45720	No	Clear	None	CLEAR	13.23	0.40
025	XSG01											
026	Field Blank	BG	07/24/24	13:20	Direct Sample	-	No	Clear	None	clear	-	-
027	G52D Duplicate	BG	07/23/24	09:26	Low Flow	45720	No	Clear	None	clear	26.17	0.40

Site Sampling Event: JOP- 24Q3

LIMS Workorder: 24071132

Technician(s): DC, TC, BG

Groundwater Sampling Summary

Joppa- 3Q 2024

WO Sample	Well ID	COMMENTS
001	G01D	
002	G02D	
003	G03	
004	G05	
005	G06	
006	G07	
007	G08	
008	G09	
009	G10	
010	G101	
011	G102	
012	G105	
013	G107	
014	G109	
015	G11	
016	G111	
017	G51D	
018	G52D	
019	G53D	
020	G54D	
021	SG03	
022	XPW01	
023	XPW02	
024	XPW03	
025	XSG01	
026	Field Blank	
027	G52D Duplicate	

Site Sampling Event: JOP- 24Q3

Stabilized Field Parameter Summary

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	LIMS ID
G01D	7/23/2024	9:38	18.1	64.6	6.35	489.9	1.49	36.74	60.6	42.90	24071132-001A
G02D	7/23/2024	10:38	16.8	62.3	6.41	356.1	2.06	4.30	129.0	43.22	24071132-002A
G03	7/23/2024	11:37	17.9	64.3	6.31	532.4	1.96	50.18	106.2	38.22	24071132-003A
G05	7/24/2024	11:43	19.2	66.6	6.40	539.7	0.65	43.54	27.4	43.27	24071132-004A
G06	7/24/2024	10:53	17.5	63.5	6.48	643.3	0.39	97.77	184.9	40.42	24071132-005A
G07	7/24/2024	9:48	16.8	62.2	6.17	768.4	0.46	86.27	202.5	40.55	24071132-006A
G08	7/24/2024	13:28	18.2	64.8	7.06	822.8	0.34	21.93	-59.4	32.83	24071132-007A
G09	7/23/2024	10:35	17.7	63.8	6.37	668.9	1.27	180.05	52.2	40.61	24071132-008A
G10	7/24/2024	12:46	18.2	64.7	6.63	1,025.8	1.47	84.60	97.1	41.03	24071132-009A
G101	7/23/2024	13:19	18.4	65.2	6.70	326.8	6.02	122.19	108.9	45.89	24071132-010A
G102	7/23/2024	14:18	17.5	63.6	6.47	295.5	6.46	22.21	123.2	57.51	24071132-011A
G105	7/24/2024	9:02	20.2	68.3	6.29	435.2	7.60	7.75	132.3	55.48	24071132-012A
G107	7/24/2024	9:40	18.2	64.8	6.59	764.1	2.45	107.73	132.4	54.42	24071132-013A
G109	7/23/2024	12:17	18.2	64.8	6.52	270.7	5.65	23.61	108.4	50.51	24071132-014A
G11	7/23/2024	11:32	18.0	64.4	6.74	349.9	2.90	56.86	89.0	49.24	24071132-015A
G111	7/24/2024	10:34	18.3	64.9	6.08	776.1	2.49	11.66	139.8	47.65	24071132-016A
G51D	7/23/2024	12:35	19.8	67.6	5.56	353.2	2.11	33.55	182.6	44.19	24071132-017A
G52D	7/23/2024	9:26	17.9	64.2	6.74	410.2	1.95	33.36	12.2	25.77	24071132-018A
G53D	7/24/2024	12:38	19.3	66.7	6.40	441.7	0.85	8.50	60.9	37.09	24071132-019A
G54D	7/23/2024	13:58	18.2	64.8	6.65	745.4	0.91	75.50	-12.8	43.00	24071132-020A
SG03	7/22/2024	13:00	DTW Only							52.58	24071132-021A
XPW01	7/24/2024	11:06	18.2	64.7	8.50	939.6	1.46	12.21	6.3	14.72	24071132-022A
XPW02	7/24/2024	12:04	19.5	67.1	7.96	4,402.8	1.22	5.37	-113.8	3.36	24071132-023A
XPW03	7/24/2024	11:34	19.0	66.1	10.94	646.5	1.42	4.03	-18.2	12.83	24071132-024A
XSG01	7/22/2024	14:08	DTW Only							1.99	24071132-025A
Field Blank	7/24/2024	13:20	QA/QC Sample							-	24071132-026A
G52D Duplicate	7/23/2024	9:26	17.9	64.2	6.74	410.2	1.95	33.36	12.2	25.77	24071132-027A

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G01D	7/23/2024	9:17	42.90	18.2	64.7	6.49	454.0	1.24	19.68	57.6
G01D	7/23/2024	9:20	42.90	18.2	64.8	6.47	454.5	1.16	21.26	69.2
G01D	7/23/2024	9:23	42.90	18.3	64.9	6.45	456.5	1.07	25.26	76.2
G01D	7/23/2024	9:26	42.90	18.2	64.8	6.45	457.1	0.95	30.44	80.7
G01D	7/23/2024	9:29	42.90	18.2	64.7	6.44	463.8	0.91	34.57	83.1
G01D	7/23/2024	9:32	42.90	18.3	64.9	6.37	484.3	1.22	40.46	80.1
G01D	7/23/2024	9:35	42.90	18.3	64.9	6.35	488.7	1.42	39.60	69.4
G01D	7/23/2024	9:38	42.90	18.1	64.6	6.35	489.9	1.49	36.74	60.6

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G02D	7/23/2024	10:26	43.22	17.0	62.6	6.47	355.9	1.87	4.28	123.5
G02D	7/23/2024	10:29	43.22	16.9	62.5	6.44	356.0	2.03	4.46	125.7
G02D	7/23/2024	10:32	43.22	17.0	62.6	6.44	355.9	2.05	7.06	126.5
G02D	7/23/2024	10:35	43.22	17.0	62.6	6.42	356.5	2.05	10.33	128.0
G02D	7/23/2024	10:38	43.22	16.8	62.3	6.41	356.1	2.06	4.30	129.0

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G03	7/23/2024	11:25	38.22	17.8	64.1	6.30	539.7	1.96	11.64	55.3
G03	7/23/2024	11:28	38.22	17.9	64.2	6.30	545.4	1.90	18.87	75.1
G03	7/23/2024	11:31	38.22	17.9	64.1	6.30	547.5	1.88	20.62	89.1
G03	7/23/2024	11:34	38.22	17.8	64.1	6.31	543.7	1.89	30.98	98.8
G03	7/23/2024	11:37	38.22	17.9	64.3	6.31	532.4	1.96	50.18	106.2

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G05	7/24/2024	11:28	43.27	19.1	66.4	6.40	554.9	0.89	23.66	50.4
G05	7/24/2024	11:31	43.27	19.2	66.6	6.40	554.7	0.70	23.71	45.0
G05	7/24/2024	11:34	43.27	18.8	65.9	6.40	552.2	0.62	26.33	40.4
G05	7/24/2024	11:37	43.27	18.7	65.6	6.40	546.0	0.61	31.48	37.8
G05	7/24/2024	11:40	43.27	19.0	66.3	6.40	542.6	0.63	35.85	35.1
G05	7/24/2024	11:43	43.27	19.2	66.6	6.40	539.7	0.65	43.54	27.4

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G06	7/24/2024	10:32	40.42	17.0	62.6	6.43	649.0	0.48	230.96	201.0
G06	7/24/2024	10:35	40.42	17.0	62.5	6.43	645.7	0.45	206.69	198.7
G06	7/24/2024	10:38	40.42	17.0	62.6	6.43	642.2	0.44	181.69	196.3
G06	7/24/2024	10:41	40.42	17.0	62.6	6.44	641.7	0.42	155.41	194.1
G06	7/24/2024	10:44	40.42	17.1	62.9	6.44	641.8	0.41	152.81	191.7
G06	7/24/2024	10:47	40.42	17.3	63.1	6.45	642.4	0.40	129.81	189.4
G06	7/24/2024	10:50	40.42	17.3	63.2	6.47	643.8	0.40	109.72	187.1
G06	7/24/2024	10:53	40.42	17.5	63.5	6.48	643.3	0.39	97.77	184.9

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G07	7/24/2024	9:36	40.55	16.9	62.4	6.07	746.1	0.66	87.60	224.6
G07	7/24/2024	9:39	40.55	16.8	62.3	6.10	754.4	0.56	79.82	217.7
G07	7/24/2024	9:42	40.55	16.8	62.3	6.13	760.8	0.51	82.27	211.9
G07	7/24/2024	9:45	40.55	16.8	62.2	6.15	765.6	0.49	81.45	206.8
G07	7/24/2024	9:48	40.55	16.8	62.2	6.17	768.4	0.46	86.27	202.5

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G08	7/24/2024	13:13	32.83	18.5	65.3	6.98	878.6	0.78	30.37	-33.0
G08	7/24/2024	13:16	32.83	18.5	65.3	7.02	858.4	0.55	25.34	-47.8
G08	7/24/2024	13:19	32.83	18.4	65.2	7.04	844.7	0.43	21.37	-54.1
G08	7/24/2024	13:22	32.83	18.4	65.1	7.05	834.7	0.39	21.75	-57.0
G08	7/24/2024	13:25	32.83	18.3	64.9	7.06	827.7	0.36	21.33	-58.6
G08	7/24/2024	13:28	32.83	18.2	64.8	7.06	822.8	0.34	21.93	-59.4

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G09	7/23/2024	10:14	40.61	17.8	64.0	6.49	660.3	2.07	101.33	58.7
G09	7/23/2024	10:17	40.61	17.8	64.0	6.45	661.7	1.82	102.71	57.1
G09	7/23/2024	10:20	40.61	17.7	63.8	6.43	663.5	1.66	123.64	55.8
G09	7/23/2024	10:23	40.61	17.7	63.8	6.41	665.0	1.55	135.14	55.0
G09	7/23/2024	10:26	40.61	17.7	63.8	6.40	666.2	1.46	149.02	54.3
G09	7/23/2024	10:29	40.61	17.7	63.8	6.39	667.0	1.38	157.43	53.6
G09	7/23/2024	10:32	40.61	17.7	63.8	6.38	667.5	1.32	160.32	52.9
G09	7/23/2024	10:35	40.61	17.7	63.8	6.37	668.9	1.27	180.05	52.2

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G10	7/24/2024	12:31	41.03	18.1	64.5	6.93	1,046.0	2.38	98.96	92.5
G10	7/24/2024	12:34	41.03	18.0	64.5	6.82	1,041.4	1.92	80.87	94.4
G10	7/24/2024	12:37	41.03	18.0	64.4	6.75	1,037.2	1.69	61.51	95.5
G10	7/24/2024	12:40	41.03	18.1	64.6	6.70	1,033.3	1.55	301.20	96.4
G10	7/24/2024	12:43	41.03	18.1	64.6	6.65	1,031.2	1.46	135.72	97.1
G10	7/24/2024	12:46	41.03	18.2	64.7	6.63	1,025.8	1.47	84.60	97.1

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G101	7/23/2024	13:04	45.89	18.4	65.2	6.72	327.7	5.99	188.59	105.2
G101	7/23/2024	13:07	45.89	18.5	65.3	6.71	327.4	6.01	174.35	106.1
G101	7/23/2024	13:10	45.89	18.5	65.2	6.71	327.5	6.02	153.75	106.9
G101	7/23/2024	13:13	45.89	18.5	65.3	6.71	327.3	6.03	143.01	107.6
G101	7/23/2024	13:16	45.89	18.4	65.1	6.71	327.4	6.04	130.86	108.3
G101	7/23/2024	13:19	45.89	18.4	65.2	6.70	326.8	6.02	122.19	108.9

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G102	7/23/2024	13:57	57.51	17.8	64.0	6.55	302.1	6.74	64.34	118.6
G102	7/23/2024	14:00	57.51	17.8	64.1	6.52	298.8	6.70	44.58	119.9
G102	7/23/2024	14:03	57.51	17.6	63.7	6.51	294.6	6.69	33.46	120.6
G102	7/23/2024	14:06	57.51	17.5	63.6	6.50	289.5	6.61	31.08	121.2
G102	7/23/2024	14:09	57.51	17.6	63.6	6.48	284.0	6.47	26.70	121.8
G102	7/23/2024	14:12	57.51	17.5	63.5	6.47	282.2	6.37	18.72	122.6
G102	7/23/2024	14:15	57.51	17.6	63.7	6.47	287.7	6.39	22.74	123.0
G102	7/23/2024	14:18	57.51	17.5	63.6	6.47	295.5	6.46	22.21	123.2

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G105	7/24/2024	8:50	55.48	20.2	68.4	6.32	463.6	7.51	14.65	125.2
G105	7/24/2024	8:53	55.48	20.2	68.3	6.31	452.0	7.51	10.92	126.9
G105	7/24/2024	8:56	55.48	20.2	68.3	6.30	441.6	7.54	11.59	129.1
G105	7/24/2024	8:59	55.48	20.2	68.3	6.30	436.6	7.58	9.73	130.7
G105	7/24/2024	9:02	55.48	20.2	68.3	6.29	435.2	7.60	7.75	132.3

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G107	7/24/2024	9:31	54.42	18.3	65.0	6.69	746.7	4.29	329.98	131.9
G107	7/24/2024	9:34	54.42	18.6	65.4	6.60	756.7	3.42	247.63	134.9
G107	7/24/2024	9:37	54.42	18.6	65.5	6.59	762.0	2.88	146.62	133.8
G107	7/24/2024	9:40	54.42	18.2	64.8	6.59	764.1	2.45	107.73	132.4

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G109	7/23/2024	11:59	50.51	18.5	65.2	6.54	275.3	5.35	31.28	100.0
G109	7/23/2024	12:02	50.51	18.3	65.0	6.54	269.2	5.60	24.64	101.7
G109	7/23/2024	12:05	50.51	18.2	64.8	6.54	268.2	5.70	22.57	103.4
G109	7/23/2024	12:08	50.51	18.2	64.8	6.53	268.7	5.70	21.08	104.9
G109	7/23/2024	12:11	50.51	18.2	64.8	6.53	269.3	5.69	21.85	106.2
G109	7/23/2024	12:14	50.51	18.2	64.8	6.52	270.1	5.67	21.39	107.3
G109	7/23/2024	12:17	50.51	18.2	64.8	6.52	270.7	5.65	23.61	108.4

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G11	7/23/2024	11:17	49.24	17.7	63.9	6.80	354.1	3.53	39.28	86.7
G11	7/23/2024	11:20	49.24	18.0	64.3	6.78	353.1	3.33	39.67	87.3
G11	7/23/2024	11:23	49.24	18.0	64.4	6.77	352.5	3.16	40.12	87.8
G11	7/23/2024	11:26	49.24	18.0	64.4	6.76	351.3	3.03	50.76	88.2
G11	7/23/2024	11:29	49.24	17.9	64.2	6.75	351.0	2.95	57.69	88.6
G11	7/23/2024	11:32	49.24	18.0	64.4	6.74	349.9	2.90	56.86	89.0

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G111	7/24/2024	10:19	47.65	18.4	65.1	6.52	762.3	4.97	6.91	119.4
G111	7/24/2024	10:22	47.65	18.2	64.7	6.25	831.1	3.66	15.20	132.3
G111	7/24/2024	10:25	47.65	18.2	64.8	6.17	830.6	3.15	19.26	136.5
G111	7/24/2024	10:28	47.65	18.3	65.0	6.12	821.6	2.85	13.91	138.7
G111	7/24/2024	10:31	47.65	18.3	64.9	6.10	802.8	2.65	13.24	139.6
G111	7/24/2024	10:34	47.65	18.3	64.9	6.08	776.1	2.49	11.66	139.8

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G51D	7/23/2024	12:17	44.19	19.0	66.2	5.57	353.6	2.55	14.05	185.9
G51D	7/23/2024	12:20	44.19	19.7	67.5	5.58	354.7	2.70	16.24	184.0
G51D	7/23/2024	12:23	44.19	20.0	67.9	5.58	354.4	2.60	41.59	182.6
G51D	7/23/2024	12:26	44.19	20.0	67.9	5.57	354.4	2.44	50.20	182.1
G51D	7/23/2024	12:29	44.19	19.8	67.6	5.56	354.0	2.33	44.01	182.2
G51D	7/23/2024	12:32	44.19	19.8	67.6	5.56	353.8	2.23	39.83	182.6
G51D	7/23/2024	12:35	44.19	19.8	67.6	5.56	353.2	2.11	33.55	182.6

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G52D	7/23/2024	9:08	25.77	17.9	64.2	6.88	411.3	3.03	9.26	8.7
G52D	7/23/2024	9:11	25.77	17.9	64.2	6.84	411.7	2.85	7.20	9.2
G52D	7/23/2024	9:14	25.77	18.1	64.6	6.80	411.1	2.57	8.43	9.6
G52D	7/23/2024	9:17	25.77	18.0	64.5	6.78	411.1	2.31	10.05	9.9
G52D	7/23/2024	9:20	25.77	18.0	64.4	6.76	410.9	2.16	22.55	10.3
G52D	7/23/2024	9:23	25.77	17.9	64.2	6.75	410.7	2.06	31.25	10.6
G52D	7/23/2024	9:26	25.77	17.9	64.2	6.74	410.2	1.95	33.36	12.2

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G53D	7/24/2024	12:20	37.09	19.3	66.8	6.39	444.5	1.80	5.46	59.9
G53D	7/24/2024	12:23	37.09	19.3	66.7	6.38	445.4	1.54	6.02	64.3
G53D	7/24/2024	12:26	37.09	19.3	66.7	6.39	444.4	1.35	6.42	63.6
G53D	7/24/2024	12:29	37.09	19.2	66.6	6.39	444.2	1.19	6.37	64.3
G53D	7/24/2024	12:32	37.09	19.2	66.5	6.39	443.1	1.02	8.11	65.6
G53D	7/24/2024	12:35	37.09	19.2	66.6	6.39	442.3	0.92	8.36	63.2
G53D	7/24/2024	12:38	37.09	19.3	66.7	6.40	441.7	0.85	8.50	60.9

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G54D	7/23/2024	13:46	43.00	18.3	65.0	6.65	775.9	1.21	39.11	-24.8
G54D	7/23/2024	13:49	43.00	18.3	64.9	6.65	764.3	1.12	46.91	-17.7
G54D	7/23/2024	13:52	43.00	18.2	64.8	6.65	755.9	1.05	60.28	-15.1
G54D	7/23/2024	13:55	43.00	18.2	64.8	6.65	750.2	0.97	62.13	-13.8
G54D	7/23/2024	13:58	43.00	18.2	64.8	6.65	745.4	0.91	75.50	-12.8

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Qulality Parameters

JOPPA POWER PLANT, EAST ASH POND

LIMS Workorder: 24071132

Joppa- 3Q 2024

JOP-257-401

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
SG03	7/22/2024	13:00	52.58	DTW Only						

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XPW01	7/24/2024	10:54	14.72	17.8	64.1	8.18	920.1	2.52	4.97	58.9
XPW01	7/24/2024	10:57	14.72	17.6	63.7	8.36	927.9	1.79	3.33	45.4
XPW01	7/24/2024	11:00	14.72	17.6	63.7	8.46	933.0	1.45	2.94	29.7
XPW01	7/24/2024	11:03	14.72	17.7	63.9	8.49	938.2	1.44	4.66	15.7
XPW01	7/24/2024	11:06	14.72	18.2	64.7	8.50	939.6	1.46	12.21	6.3

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XPW02	7/24/2024	11:55	3.36	19.3	66.7	8.17	4,414.1	2.81	6.69	1.1
XPW02	7/24/2024	11:58	3.36	19.6	67.2	8.06	4,406.5	1.92	5.39	-66.9
XPW02	7/24/2024	12:01	3.36	19.6	67.2	8.00	4,412.2	1.43	5.24	-100.5
XPW02	7/24/2024	12:04	3.36	19.5	67.1	7.96	4,402.8	1.22	5.37	-113.8

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XPW03	7/24/2024	11:25	12.83	19.3	66.8	10.92	620.3	2.78	3.73	-16.5
XPW03	7/24/2024	11:28	12.83	19.2	66.6	10.91	628.4	1.98	3.78	-17.0
XPW03	7/24/2024	11:31	12.83	19.1	66.3	10.93	642.4	1.61	3.91	-18.1
XPW03	7/24/2024	11:34	12.83	19.0	66.1	10.94	646.5	1.42	4.03	-18.2

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Qulality Parameters

JOPPA POWER PLANT, EAST ASH POND

LIMS Workorder: 24071132

Joppa- 3Q 2024

JOP-257-401

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XSG01	7/22/2024	14:08	1.99	DTW Only						

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Qulality Parameters

JOPPA POWER PLANT, EAST ASH POND

LIMS Workorder: 24071132

Joppa- 3Q 2024

JOP-257-401

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
Field Blank	7/24/2024	13:20	-	QA/QC Sample						

Site Sampling Event: JOP- 24Q3

Groundwater Sampling Field Form- Quality Parameters

JOPPA POWER PLANT, EAST ASH POND

JOP-257-401

LIMS Workorder: 24071132

Joppa- 3Q 2024

Technician(s): DC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G52D Duplicate	7/23/2024	9:08	25.77	17.9	64.2	6.88	411.3	3.03	9.26	8.7
G52D Duplicate	7/23/2024	9:11	25.77	17.9	64.2	6.84	411.7	2.85	7.20	9.2
G52D Duplicate	7/23/2024	9:14	25.77	18.1	64.6	6.80	411.1	2.57	8.43	9.6
G52D Duplicate	7/23/2024	9:17	25.77	18.0	64.5	6.78	411.1	2.31	10.05	9.9
G52D Duplicate	7/23/2024	9:20	25.77	18.0	64.4	6.76	410.9	2.16	22.55	10.3
G52D Duplicate	7/23/2024	9:23	25.77	17.9	64.2	6.75	410.7	2.06	31.25	10.6
G52D Duplicate	7/23/2024	9:26	25.77	17.9	64.2	6.74	410.2	1.95	33.36	12.2

Site Sampling Event: JOP- 24Q3

LIMS Workorder: 24071132

Technician(s): DC, TC, BG

Field Calibration Log(s)

Joppa- 3Q 2024

Field Temp SOP 1156 - SM 2550 B

Field pH SOP 1152 - SW-846 9040B - SM 4500-H B

Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 218083 Technician(s): Tracy Crroll Date: 7/23/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.01	7/23/24 8:51
7.0 Buffer	WC240307F	7.00	7/23/24 8:51
10.0 Buffer	WC230614B	10.00	7/23/24 8:52
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	98627	1412	7/23/24 8:54

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-1	LCS	7/23/24 9:00	24.1	7.08	1,405	0.29		
CCV-1	CCV	7/23/24 14:25	25.5	7.05	1,461	0.95		

Comments:

Field Meter ID: Pine 218083 Technician(s): Tracy Carroll Date: 7/24/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	7/24/24 8:34
7.0 Buffer	WC240307F	7.00	7/24/24 8:32
10.0 Buffer	WC230614B	10.00	7/24/24 8:43
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	98627	1412	7/24/24 8:29

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-2	LCS	7/24/24 8:43	24.5	7.05	1,413	0.89		
CCV-2	CCV	7/24/24 13:34	24.4	7.03	1,422	0.66		

Comments:

Site Sampling Event: JOP- 24Q3

LIMS Workorder: 24071132

Technician(s): DC, TC, BG

Field Calibration Log(s)

Joppa- 3Q 2024

Field Temp SOP 1156 - SM 2550 B

Field pH SOP 1152 - SW-846 9040B - SM 4500-H B

Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 45720 Technician(s): Brett Gillihan Date: 7/23/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	7/23/24 8:20
7.0 Buffer	WC24307F	6.99	7/23/24 8:11
10.0 Buffer	WC240521B	10.02	7/23/24 8:23
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	98627	1418	7/23/24 8:34

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	1.8	7/23/24 8:42
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-1	LCS	7/23/24 8:44	21.03	7.00	1,413	1.8		
CCV-1	CCV	7/23/24 15:05	23.21	7.01	1,432	1.1		

Comments:

Field Meter ID: Pine 45720 Technician(s): Brett Gillihan Date: 7/24/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	3.99	7/24/24 8:25
7.0 Buffer	WC24307F	7.01	7/24/24 8:16
10.0 Buffer	WC240521B	10.03	7/24/24 8:29
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	98627	1418	7/24/24 8:34

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	1.5	7/24/24 8:35
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-2	LCS	7/24/24 8:36	21.4	7.01	1,418	1.2		
CCV-2	CCV	7/24/24 17:45	22.2	7.00	1,420	1.5		

Comments:



INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

11669 Lilburn Park Rd.
St. Louis, MO 63146
Office: 314.344.1079

Pine Environmental Services, Inc.

Instrument ID 218083
Description YSI Pro DSS Sonde
Calibrated 6/27/2024 10:21:25AM

Manufacturer YSI
Model Number Pro DSS
Serial Number/ Lot 23F102674
Number
Location St. Louis
Department

State Certified
Status Pass
Temp °C 22.2
Humidity % 43

Calibration Specifications

Group # 1
Group Name PH
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
7.00 / 7.00	PH	7.00	PH	7.01	7.02	0.29%	Pass
4.00 / 4.00	PH	4.00	PH	4.07	4.00	0.00%	Pass
10.00 / 10.00	PH	10.00	PH	10.04	10.04	0.40%	Pass

Group # 2
Group Name Turbidity (NTU)
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
0.00 / 0.00	FNU	0.00	FNU	0.34	0.00	0.00%	Pass
124.00 / 124.00	FNU	124.00	FNU	126.32	124.00	0.00%	Pass

Group # 3
Group Name Conductivity
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.000

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
1.413 / 1.413	ms/cm	1.413	ms/cm	1.501	1.413	0.00%	Pass

Group # 4
Group Name Redox (ORP)
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
240.00 / 240.00	mv	240.00	mv	242.90	240.00	0.00%	Pass

Group # 5
Group Name Dissolved Oxygen Span
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>



INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

11669 Lilburn Park Rd.
St. Louis, MO 63146
Office: 314.344.1079

Pine Environmental Services, Inc.

Instrument ID 45720
Description YSI Pro DSS
Calibrated 6/27/2024 10:15:34AM

Manufacturer YSI
Model Number Pro DSS
Serial Number/ Lot Number 19E101794
Location St. Louis
Department

State Certified
Status Pass
Temp °C 22.2
Humidity % 43

Calibration Specifications

Group # 1				Range Acc % 0.0000			
Group Name PH				Reading Acc % 3.0000			
Stated Accy Pct of Reading				Plus/Minus 0.00			
Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
7.00 / 7.00	PH	7.00	PH	7.00	7.02	0.29%	Pass
4.00 / 4.00	PH	4.00	PH	3.89	4.00	0.00%	Pass
10.00 / 10.00	PH	10.00	PH	10.05	10.04	0.40%	Pass
Group # 2				Range Acc % 0.0000			
Group Name Turbidity				Reading Acc % 3.0000			
Stated Accy Pct of Reading				Plus/Minus 0.00			
Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
0.00 / 0.00	NTU	0.00	NTU	-0.43	0.00	0.00%	Pass
124.00 / 124.00	NTU	124.00	NTU	128.39	124.00	0.00%	Pass
Group # 3				Range Acc % 0.0000			
Group Name Conductivity				Reading Acc % 3.0000			
Stated Accy Pct of Reading				Plus/Minus 0.000			
Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
1.413 / 1.413	ms/cm	1.413	ms/cm	1.378	1.413	0.00%	Pass
Group # 4				Range Acc % 0.0000			
Group Name Redox (ORP)				Reading Acc % 3.0000			
Stated Accy Pct of Reading				Plus/Minus 0.00			
Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
240.00 / 240.00	mv	240.00	mv	244.10	240.00	0.00%	Pass
Group # 5				Range Acc % 0.0000			
Group Name Dissolved Oxygen Span				Reading Acc % 3.0000			
Stated Accy Pct of Reading				Plus/Minus 0.00			
Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail

November 26, 2024

Eric Bauer
Ramboll
234 W. Florida Street
Fifth Floor
Milwaukee, WI 53204
TEL: (414) 837-3607
FAX: (414) 837-3608



Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: JOP-24Q4

WorkOrder: 24100635

Dear Eric Bauer:

TEKLAB, INC received 22 samples for JOP_257_401 on 10/22/2024 4:20:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Elizabeth A. Hurley
Director of Customer Service
(618)344-1004 ex 33
ehurley@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

This reporting package includes the following:

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Quality Control Results	31
Receiving Check List	51
Chain of Custody	Appended

Definitions

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

Abbr Definition

* Analytes on report marked with an asterisk are not NELAP accredited

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.

DNI Did not ignite

DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

TNTC Too numerous to count (> 200 CFU)



Definitions

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

Qualifiers

# - Unknown hydrocarbon	B - Analyte detected in associated Method Blank
C - RL shown is a Client Requested Quantitation Limit	E - Value above quantitation range
H - Holding times exceeded	I - Associated internal standard was outside method criteria
J - Analyte detected below quantitation limits	M - Manual Integration used to determine area response
ND - Not Detected at the Reporting Limit	R - RPD outside accepted recovery limits
S - Spike Recovery outside recovery limits	T - TIC(Tentatively identified compound)
X - Value exceeds Maximum Contaminant Level	



Case Narrative

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

Cooler Receipt Temp: 5.1 °C

An employee of Teklab, Inc. collected the sample(s).

Equipment Blanks 2 and 3 were not needed.

XSG01 and SG03 date/time of measurement and collection per field file/s. EAH 10/24/24

Per Eric Bauer's request, only JOP_257_401 data is included in this report. EAH 11/26/24

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com



Accreditations

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Illinois	IEPA	1004652024-2	NELAP	4/30/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2025	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2025	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2025	Collinsville
Oklahoma	ODEQ	9978	NELAP	12/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2025	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2026	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Mississippi	MSDH			4/30/2025	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100635-001
Matrix: GROUNDWATER

Work Order: 24100635
Report Date: 26-Nov-24

Client Sample ID: G01D

Collection Date: 10/21/2024 11:24

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		44.65	ft	1	10/21/2024 11:24	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		19	NTU	1	10/21/2024 11:24	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		102	mV	1	10/21/2024 11:24	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		776	µS/cm	1	10/21/2024 11:24	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		18.5	°C	1	10/21/2024 11:24	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.35	mg/L	1	10/21/2024 11:24	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		6.32		1	10/21/2024 11:24	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		223	mg/L	1	10/24/2024 10:09	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 10:09	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		380	mg/L	2.5	10/25/2024 14:56	R355294
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50		ND	mg/L	10	10/24/2024 7:11	R355097
Chloride	NELAP	1.00	5.00		12.8	mg/L	10	10/24/2024 7:11	R355097
Sulfate	NELAP	3.00	10.0		39.0	mg/L	10	10/24/2024 7:11	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		38.1	mg/L	1	10/24/2024 17:37	230147
Magnesium	NELAP	0.0055	0.0500		11.2	mg/L	1	10/24/2024 17:37	230147
Potassium	NELAP	0.0400	0.100		1.43	mg/L	1	10/24/2024 17:37	230147
Sodium	NELAP	0.0180	0.0500	S	72.9	mg/L	1	10/24/2024 17:37	230147
<i>Matrix spike control limits are not applicable due to high sample/spike ratio.</i>									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	11/11/2024 9:21	230147
Arsenic	NELAP	0.0004	0.0010	J	0.0007	mg/L	5	10/31/2024 20:11	230147
Barium	NELAP	0.0007	0.0010		0.208	mg/L	5	10/31/2024 20:11	230147
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 20:11	230147
Boron	NELAP	0.0092	0.025	J	0.023	mg/L	5	10/31/2024 20:11	230147
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 20:11	230147
Chromium	NELAP	0.0007	0.0015		0.0025	mg/L	5	11/06/2024 21:33	230147
Cobalt	NELAP	0.0001	0.0010		0.0011	mg/L	5	11/06/2024 21:33	230147
Lead	NELAP	0.0006	0.0010	J	0.0007	mg/L	5	10/31/2024 20:11	230147
Lithium	*	0.0015	0.0030	J	0.0018	mg/L	5	10/31/2024 20:11	230147
Molybdenum	NELAP	0.0006	0.0015	J	0.0007	mg/L	5	10/31/2024 20:11	230147
Selenium	NELAP	0.0006	0.0010		0.0013	mg/L	5	11/08/2024 16:07	230661
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 20:11	230147
<i>LCS recovered outside upper control limits for As. Sample results are below the reporting limit. Data is reportable per the TNI Standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 12:07	230158



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q4

Work Order: 24100635
Report Date: 26-Nov-24

Lab ID: 24100635-002

Client Sample ID: G02D

Matrix: GROUNDWATER

Collection Date: 10/21/2024 12:02

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		44.89	ft	1	10/21/2024 12:02	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		3.0	NTU	1	10/21/2024 12:02	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		120	mV	1	10/21/2024 12:02	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		609	µS/cm	1	10/21/2024 12:02	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		14.8	°C	1	10/21/2024 12:02	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		2.76	mg/L	1	10/21/2024 12:02	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		6.24		1	10/21/2024 12:02	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		162	mg/L	1	10/24/2024 10:15	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 10:15	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		280	mg/L	1	10/25/2024 14:57	R355294
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50		ND	mg/L	10	10/24/2024 7:23	R355097
Chloride	NELAP	1.00	5.00		18.6	mg/L	10	10/24/2024 7:23	R355097
Sulfate	NELAP	3.00	10.0		13.0	mg/L	10	10/24/2024 7:23	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		36.4	mg/L	1	10/24/2024 17:42	230147
Magnesium	NELAP	0.0055	0.0500		10.2	mg/L	1	10/24/2024 17:42	230147
Potassium	NELAP	0.0400	0.100		1.19	mg/L	1	10/24/2024 17:42	230147
Sodium	NELAP	0.0180	0.0500		34.0	mg/L	1	10/24/2024 17:42	230147
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	11/11/2024 7:54	230147
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/31/2024 19:59	230147
Barium	NELAP	0.0007	0.0010		0.191	mg/L	5	10/31/2024 19:59	230147
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 19:59	230147
Boron	NELAP	0.0092	0.0250		0.0382	mg/L	5	10/31/2024 19:59	230147
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 19:59	230147
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	10/31/2024 19:59	230147
Cobalt	NELAP	0.0001	0.0010		< 0.0010	mg/L	5	11/06/2024 21:16	230147
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 19:59	230147
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	10/31/2024 19:59	230147
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	10/31/2024 19:59	230147
Selenium	NELAP	0.0006	0.0010		0.0021	mg/L	5	11/01/2024 22:59	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 19:59	230147
<i>LCS recovered outside upper control limits for As. Sample results are below the reporting limit. Data is reportable per the TNI Standard.</i>									
<i>CCV recovered outside the upper control limits for Cr. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 12:09	230158



Client: Ramboll
Client Project: JOP-24Q4

Work Order: 24100635
Report Date: 26-Nov-24

Lab ID: 24100635-003

Client Sample ID: G03

Matrix: GROUNDWATER

Collection Date: 10/21/2024 12:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		39.89	ft	1	10/21/2024 12:45	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		34	NTU	1	10/21/2024 12:45	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		129	mV	1	10/21/2024 12:45	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		896	µS/cm	1	10/21/2024 12:45	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		17.0	°C	1	10/21/2024 12:45	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		2.17	mg/L	1	10/21/2024 12:45	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		6.04		1	10/21/2024 12:45	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		145	mg/L	1	10/24/2024 10:21	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 10:21	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		385	mg/L	2.5	10/25/2024 14:57	R355294
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50		ND	mg/L	10	10/24/2024 7:58	R355097
Chloride	NELAP	1.00	5.00		23.5	mg/L	10	10/24/2024 7:58	R355097
Sulfate	NELAP	3.00	10.0		74.9	mg/L	10	10/24/2024 7:58	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		47.8	mg/L	1	10/24/2024 17:44	230147
Magnesium	NELAP	0.0055	0.0500		15.7	mg/L	1	10/24/2024 17:44	230147
Potassium	NELAP	0.0400	0.100		1.63	mg/L	1	10/24/2024 17:44	230147
Sodium	NELAP	0.0180	0.0500		36.8	mg/L	1	10/24/2024 17:44	230147
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	J	0.0009	mg/L	5	11/11/2024 9:13	230147
Arsenic	NELAP	0.0004	0.0010		0.0022	mg/L	5	11/01/2024 23:05	230147
Barium	NELAP	0.0007	0.0010		0.0649	mg/L	5	10/31/2024 20:05	230147
Beryllium	NELAP	0.0002	0.0010	J	0.0005	mg/L	5	10/31/2024 20:05	230147
Boron	NELAP	0.0092	0.0250		0.263	mg/L	5	10/31/2024 20:05	230147
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 20:05	230147
Chromium	NELAP	0.0007	0.0015		0.0115	mg/L	5	11/06/2024 21:22	230147
Cobalt	NELAP	0.0001	0.0010		0.0056	mg/L	5	11/06/2024 21:22	230147
Lead	NELAP	0.0006	0.0010		0.0029	mg/L	5	10/31/2024 20:05	230147
Lithium	*	0.0015	0.0030		0.0044	mg/L	5	10/31/2024 20:05	230147
Molybdenum	NELAP	0.0006	0.0015	J	0.0008	mg/L	5	10/31/2024 20:05	230147
Selenium	NELAP	0.0006	0.0010	J	0.0007	mg/L	5	10/31/2024 20:05	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 20:05	230147
<i>LCS recovered outside upper control limits for Se. Sample results are below the reporting limit. Data is reportable per the TNI Standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 12:11	230158



Client: Ramboll
Client Project: JOP-24Q4

Work Order: 24100635
Report Date: 26-Nov-24

Lab ID: 24100635-004

Client Sample ID: G05

Matrix: GROUNDWATER

Collection Date: 10/22/2024 9:46

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		45.56	ft	1	10/22/2024 9:46	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		12	NTU	1	10/22/2024 9:46	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		73	mV	1	10/22/2024 9:46	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		894	µS/cm	1	10/22/2024 9:46	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		17.1	°C	1	10/22/2024 9:46	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.98	mg/L	1	10/22/2024 9:46	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		6.25		1	10/22/2024 9:46	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		195	mg/L	1	10/24/2024 10:27	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 10:27	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		428	mg/L	1	10/25/2024 14:57	R355294
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50	J	0.28	mg/L	10	10/24/2024 8:09	R355097
Chloride	NELAP	1.00	5.00		24.2	mg/L	10	10/24/2024 8:09	R355097
Sulfate	NELAP	3.00	10.0		89.8	mg/L	10	10/24/2024 8:09	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		54.2	mg/L	1	10/24/2024 17:45	230147
Magnesium	NELAP	0.0055	0.0500		20.2	mg/L	1	10/24/2024 17:45	230147
Potassium	NELAP	0.0400	0.100		2.51	mg/L	1	10/24/2024 17:45	230147
Sodium	NELAP	0.0180	0.0500		49.2	mg/L	1	10/24/2024 17:45	230147
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	J	0.0005	mg/L	5	11/11/2024 9:17	230147
Arsenic	NELAP	0.0004	0.0010		0.0010	mg/L	5	11/01/2024 23:11	230147
Barium	NELAP	0.0007	0.0010		0.217	mg/L	5	10/31/2024 20:54	230147
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 20:54	230147
Boron	NELAP	0.0092	0.0250		0.0525	mg/L	5	10/31/2024 20:54	230147
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 20:54	230147
Chromium	NELAP	0.0007	0.0015	J	0.0010	mg/L	5	11/06/2024 21:28	230147
Cobalt	NELAP	0.0001	0.0010		0.0012	mg/L	5	11/06/2024 21:28	230147
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 20:54	230147
Lithium	*	0.0015	0.0030		0.0033	mg/L	5	10/31/2024 20:54	230147
Molybdenum	NELAP	0.0006	0.0015		0.0055	mg/L	5	10/31/2024 20:54	230147
Selenium	NELAP	0.0006	0.0010	J	0.0008	mg/L	5	11/01/2024 23:11	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 20:54	230147
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 12:13	230158



Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

Lab ID: 24100635-005

Client Sample ID: G06

Matrix: GROUNDWATER

Collection Date: 10/22/2024 10:27

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		41.91	ft	1	10/22/2024 10:27	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		60	NTU	1	10/22/2024 10:27	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		107	mV	1	10/22/2024 10:27	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		1020	µS/cm	1	10/22/2024 10:27	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		15.5	°C	1	10/22/2024 10:27	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.06	mg/L	1	10/22/2024 10:27	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		6.40		1	10/22/2024 10:27	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		173	mg/L	1	10/24/2024 10:33	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 10:33	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		605	mg/L	2.5	10/25/2024 14:57	R355294
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50		ND	mg/L	10	10/24/2024 8:21	R355097
Chloride	NELAP	1.00	5.00		17.3	mg/L	10	10/24/2024 8:21	R355097
Sulfate	NELAP	3.00	10.0		179	mg/L	10	10/24/2024 8:21	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100	S	81.4	mg/L	1	10/24/2024 17:47	230147
Magnesium	NELAP	0.0055	0.0500		22.7	mg/L	1	10/24/2024 17:47	230147
Potassium	NELAP	0.0400	0.100		3.14	mg/L	1	10/24/2024 17:47	230147
Sodium	NELAP	0.0180	0.0500	S	43.4	mg/L	1	10/24/2024 17:47	230147
<i>Matrix spike control limits are not applicable due to high sample/spike ratio.</i>									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	J	0.0005	mg/L	5	11/13/2024 8:11	230147
Arsenic	NELAP	0.0004	0.0010		0.0031	mg/L	5	11/01/2024 23:17	230147
Barium	NELAP	0.0007	0.0010		0.0519	mg/L	5	10/31/2024 21:37	230147
Beryllium	NELAP	0.0002	0.0010	J	0.0004	mg/L	5	10/31/2024 21:37	230147
Boron	NELAP	0.0092	0.0250		3.34	mg/L	5	10/31/2024 21:37	230147
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 21:37	230147
Chromium	NELAP	0.0007	0.0015		0.0143	mg/L	5	11/06/2024 22:54	230147
Cobalt	NELAP	0.0001	0.0010		0.0033	mg/L	5	11/06/2024 22:54	230147
Lead	NELAP	0.0006	0.0010		0.0040	mg/L	5	10/31/2024 21:37	230147
Lithium	*	0.0015	0.0030		0.0078	mg/L	5	10/31/2024 21:37	230147
Molybdenum	NELAP	0.0006	0.0015	J	0.0009	mg/L	5	10/31/2024 21:37	230147
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 21:37	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 21:37	230147
<i>LCS recovered outside upper control limits for Se. Sample results are below the reporting limit. Data is reportable per the TNI Standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 12:16	230158



Client: Ramboll
Client Project: JOP-24Q4

Work Order: 24100635
Report Date: 26-Nov-24

Lab ID: 24100635-006

Client Sample ID: G07

Matrix: GROUNDWATER

Collection Date: 10/22/2024 10:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		41.93	ft	1	10/22/2024 10:55	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		120	NTU	1	10/22/2024 10:55	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		123	mV	1	10/22/2024 10:55	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		1180	µS/cm	1	10/22/2024 10:55	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		15.7	°C	1	10/22/2024 10:55	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.86	mg/L	1	10/22/2024 10:55	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		6.15		1	10/22/2024 10:55	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		173	mg/L	1	10/24/2024 10:38	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 10:38	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50	H	745	mg/L	2.5	10/29/2024 14:24	R355423
Sample analysis did not meet hold time requirements.									
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50	J	0.33	mg/L	10	10/24/2024 8:33	R355097
Chloride	NELAP	1.00	5.00		16.9	mg/L	10	10/24/2024 8:33	R355097
Sulfate	NELAP	3.00	10.0		273	mg/L	10	10/24/2024 8:33	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		100	mg/L	1	10/24/2024 17:59	230147
Magnesium	NELAP	0.0055	0.0500		25.1	mg/L	1	10/24/2024 17:59	230147
Potassium	NELAP	0.0400	0.100		4.74	mg/L	1	10/24/2024 17:59	230147
Sodium	NELAP	0.0180	0.0500		70.1	mg/L	1	10/24/2024 17:59	230147
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		0.0022	mg/L	5	11/11/2024 10:52	230147
Arsenic	NELAP	0.0004	0.0010		0.0028	mg/L	5	11/01/2024 23:59	230147
Barium	NELAP	0.0007	0.0010		0.108	mg/L	5	10/31/2024 21:00	230147
Beryllium	NELAP	0.0002	0.0010	J	0.0006	mg/L	5	10/31/2024 21:00	230147
Boron	NELAP	0.0092	0.0250		4.72	mg/L	5	10/31/2024 21:00	230147
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 21:00	230147
Chromium	NELAP	0.0007	0.0015		0.0190	mg/L	5	11/06/2024 22:14	230147
Cobalt	NELAP	0.0001	0.0010		0.0032	mg/L	5	11/06/2024 22:14	230147
Lead	NELAP	0.0006	0.0010		0.0042	mg/L	5	10/31/2024 21:00	230147
Lithium	*	0.0015	0.0030		0.0076	mg/L	5	10/31/2024 21:00	230147
Molybdenum	NELAP	0.0006	0.0015	J	0.0012	mg/L	5	10/31/2024 21:00	230147
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 21:00	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 21:00	230147
LCS recovered outside upper control limits for Se. Sample results are below the reporting limit. Data is reportable per the TNI Standard.									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 12:18	230158



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q4

Work Order: 24100635
Report Date: 26-Nov-24

Lab ID: 24100635-007

Client Sample ID: G08

Matrix: GROUNDWATER

Collection Date: 10/22/2024 8:22

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		33.02	ft	1	10/22/2024 8:22	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		130	NTU	1	10/22/2024 8:22	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		-67	mV	1	10/22/2024 8:22	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		1330	µS/cm	1	10/22/2024 8:22	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		15.0	°C	1	10/22/2024 8:22	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.01	mg/L	1	10/22/2024 8:22	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		6.82		1	10/22/2024 8:22	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		161	mg/L	1	10/24/2024 10:44	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 10:44	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50	H	690	mg/L	2.5	10/29/2024 14:24	R355423
Sample analysis did not meet hold time requirements.									
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50	J	0.20	mg/L	10	10/24/2024 8:45	R355097
Chloride	NELAP	1.00	5.00		12.3	mg/L	10	10/24/2024 8:45	R355097
Sulfate	NELAP	3.00	10.0		348	mg/L	10	10/24/2024 8:45	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		131	mg/L	1	10/24/2024 18:01	230147
Magnesium	NELAP	0.0055	0.0500		32.2	mg/L	1	10/24/2024 18:01	230147
Potassium	NELAP	0.0400	0.100		2.36	mg/L	1	10/24/2024 18:01	230147
Sodium	NELAP	0.0180	0.0500		40.1	mg/L	1	10/24/2024 18:01	230147
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	J	0.0007	mg/L	5	11/11/2024 10:56	230147
Arsenic	NELAP	0.0004	0.0010		0.0163	mg/L	5	11/02/2024 0:05	230147
Barium	NELAP	0.0007	0.0010		0.122	mg/L	5	10/31/2024 21:06	230147
Beryllium	NELAP	0.0002	0.0010	J	0.0007	mg/L	5	10/31/2024 21:06	230147
Boron	NELAP	0.0092	0.0250		5.75	mg/L	5	10/31/2024 21:06	230147
Cadmium	NELAP	0.0002	0.0010	J	0.0006	mg/L	5	10/31/2024 21:06	230147
Chromium	NELAP	0.0007	0.0015		0.0177	mg/L	5	11/06/2024 22:20	230147
Cobalt	NELAP	0.0001	0.0010		0.0115	mg/L	5	11/06/2024 22:20	230147
Lead	NELAP	0.0006	0.0010		0.0049	mg/L	5	10/31/2024 21:06	230147
Lithium	*	0.0015	0.0030		0.0062	mg/L	5	10/31/2024 21:06	230147
Molybdenum	NELAP	0.0006	0.0015		0.0030	mg/L	5	10/31/2024 21:06	230147
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 21:06	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 21:06	230147
LCS recovered outside upper control limits for Se. Sample results are below the reporting limit. Data is reportable per the TNI Standard.									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 12:20	230158



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100635-008
Matrix: GROUNDWATER

Work Order: 24100635
Report Date: 26-Nov-24

Client Sample ID: G09

Collection Date: 10/22/2024 11:39

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		41.79	ft	1	10/22/2024 11:39	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		26	NTU	1	10/22/2024 11:39	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		14	mV	1	10/22/2024 11:39	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		1010	µS/cm	1	10/22/2024 11:39	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		18.3	°C	1	10/22/2024 11:39	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.84	mg/L	1	10/22/2024 11:39	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		5.91		1	10/22/2024 11:39	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		114	mg/L	1	10/24/2024 10:50	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 10:50	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50	H	485	mg/L	2.5	10/29/2024 14:25	R355423
Sample analysis did not meet hold time requirements.									
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50		ND	mg/L	10	10/24/2024 8:56	R355097
Chloride	NELAP	1.00	5.00		13.2	mg/L	10	10/24/2024 8:56	R355097
Sulfate	NELAP	3.00	10.0		226	mg/L	10	10/24/2024 8:56	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		61.2	mg/L	1	10/24/2024 18:03	230147
Magnesium	NELAP	0.0055	0.0500		23.7	mg/L	1	10/24/2024 18:03	230147
Potassium	NELAP	0.0400	0.100		0.939	mg/L	1	10/24/2024 18:03	230147
Sodium	NELAP	0.0180	0.0500		57.1	mg/L	1	10/24/2024 18:03	230147
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	J	0.0006	mg/L	5	11/11/2024 11:01	230147
Arsenic	NELAP	0.0004	0.0010		0.0028	mg/L	5	11/02/2024 0:11	230147
Barium	NELAP	0.0007	0.0010		0.0349	mg/L	5	10/31/2024 21:12	230147
Beryllium	NELAP	0.0002	0.0010	J	0.0004	mg/L	5	10/31/2024 21:12	230147
Boron	NELAP	0.0092	0.0250		3.82	mg/L	5	10/31/2024 21:12	230147
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 21:12	230147
Chromium	NELAP	0.0007	0.0015		0.0038	mg/L	5	11/06/2024 22:25	230147
Cobalt	NELAP	0.0001	0.0010		0.0031	mg/L	5	11/06/2024 22:25	230147
Lead	NELAP	0.0006	0.0010	J	0.0009	mg/L	5	10/31/2024 21:12	230147
Lithium	*	0.0015	0.0030		0.0045	mg/L	5	10/31/2024 21:12	230147
Molybdenum	NELAP	0.0006	0.0015	J	0.0008	mg/L	5	10/31/2024 21:12	230147
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 21:12	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 21:12	230147
LCS recovered outside upper control limits for Se. Sample results are below the reporting limit. Data is reportable per the TNI Standard.									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 12:57	230158



Client: Ramboll
Client Project: JOP-24Q4

Work Order: 24100635
Report Date: 26-Nov-24

Lab ID: 24100635-009

Client Sample ID: G10

Matrix: GROUNDWATER

Collection Date: 10/21/2024 15:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		42.12	ft	1	10/21/2024 15:10	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		380	NTU	1	10/21/2024 15:10	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		49	mV	1	10/21/2024 15:10	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		1570	µS/cm	1	10/21/2024 15:10	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		17.7	°C	1	10/21/2024 15:10	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.12	mg/L	1	10/21/2024 15:10	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		6.21		1	10/21/2024 15:10	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		273	mg/L	1	10/24/2024 10:55	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 10:55	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	80	100		1040	mg/L	5	10/25/2024 15:04	R355294
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50	J	0.44	mg/L	10	10/24/2024 9:55	R355097
Chloride	NELAP	1.00	5.00		17.2	mg/L	10	10/24/2024 9:55	R355097
Sulfate	NELAP	3.00	10.0		327	mg/L	10	10/24/2024 9:55	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		127	mg/L	1	10/24/2024 18:04	230147
Magnesium	NELAP	0.0055	0.0500		34.9	mg/L	1	10/24/2024 18:04	230147
Potassium	NELAP	0.0400	0.100		8.49	mg/L	1	10/24/2024 18:04	230147
Sodium	NELAP	0.0180	0.0500		79.6	mg/L	1	10/24/2024 18:04	230147
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	J	0.0006	mg/L	5	11/11/2024 11:05	230147
Arsenic	NELAP	0.0004	0.0010		0.151	mg/L	5	11/02/2024 0:17	230147
Barium	NELAP	0.0007	0.0010		0.119	mg/L	5	10/31/2024 21:18	230147
Beryllium	NELAP	0.0002	0.0010		0.0025	mg/L	5	10/31/2024 21:18	230147
Boron	NELAP	0.0092	0.0250		2.38	mg/L	5	10/31/2024 21:18	230147
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 21:18	230147
Chromium	NELAP	0.0007	0.0015		0.0074	mg/L	5	11/06/2024 22:31	230147
Cobalt	NELAP	0.0001	0.0010		0.0058	mg/L	5	11/06/2024 22:31	230147
Lead	NELAP	0.0006	0.0010		0.0015	mg/L	5	10/31/2024 21:18	230147
Lithium	*	0.0015	0.0030		0.0214	mg/L	5	10/31/2024 21:18	230147
Molybdenum	NELAP	0.0006	0.0015		0.0036	mg/L	5	10/31/2024 21:18	230147
Selenium	NELAP	0.0006	0.0010	J	0.0008	mg/L	5	11/02/2024 0:17	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 21:18	230147
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 13:03	230158



Client: Ramboll
Client Project: JOP-24Q4

Work Order: 24100635
Report Date: 26-Nov-24

Lab ID: 24100635-010

Client Sample ID: G11

Matrix: GROUNDWATER

Collection Date: 10/21/2024 14:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		49.16	ft	1	10/21/2024 14:10	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		64	NTU	1	10/21/2024 14:10	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		162	mV	1	10/21/2024 14:10	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		1090	µS/cm	1	10/21/2024 14:10	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		18.3	°C	1	10/21/2024 14:10	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		2.22	mg/L	1	10/21/2024 14:10	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		5.74		1	10/21/2024 14:10	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		102	mg/L	1	10/24/2024 11:02	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 11:02	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		530	mg/L	2.5	10/25/2024 15:04	R355294
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50		ND	mg/L	10	10/24/2024 10:06	R355097
Chloride	NELAP	1.00	5.00		23.2	mg/L	10	10/24/2024 10:06	R355097
Sulfate	NELAP	3.00	10.0		205	mg/L	10	10/24/2024 10:06	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		63.3	mg/L	1	10/24/2024 18:06	230147
Magnesium	NELAP	0.0055	0.0500		19.6	mg/L	1	10/24/2024 18:06	230147
Potassium	NELAP	0.0400	0.100		1.65	mg/L	1	10/24/2024 18:06	230147
Sodium	NELAP	0.0180	0.0500		42.4	mg/L	1	10/24/2024 18:06	230147
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	11/11/2024 11:09	230147
Arsenic	NELAP	0.0004	0.0010	J	0.0009	mg/L	5	10/31/2024 21:25	230147
Barium	NELAP	0.0007	0.0010		0.0322	mg/L	5	10/31/2024 21:25	230147
Beryllium	NELAP	0.0002	0.0010	J	0.0003	mg/L	5	10/31/2024 21:25	230147
Boron	NELAP	0.0092	0.0250		0.385	mg/L	5	10/31/2024 21:25	230147
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 21:25	230147
Chromium	NELAP	0.0007	0.0015		0.0025	mg/L	5	11/06/2024 22:37	230147
Cobalt	NELAP	0.0001	0.0010		0.0034	mg/L	5	11/06/2024 22:37	230147
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 21:25	230147
Lithium	*	0.0015	0.0030		0.0055	mg/L	5	10/31/2024 21:25	230147
Molybdenum	NELAP	0.0006	0.0015	J	0.0010	mg/L	5	10/31/2024 21:25	230147
Selenium	NELAP	0.0006	0.0010		0.0020	mg/L	5	11/02/2024 0:23	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 21:25	230147
<i>LCS recovered outside upper control limits for As. Sample results are below the reporting limit. Data is reportable per the TNI Standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 13:06	230158



Client: Ramboll
Client Project: JOP-24Q4

Work Order: 24100635
Report Date: 26-Nov-24

Lab ID: 24100635-011

Client Sample ID: G51D

Matrix: GROUNDWATER

Collection Date: 10/21/2024 13:23

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		45.88	ft	1	10/21/2024 13:23	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		64	NTU	1	10/21/2024 13:23	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		168	mV	1	10/21/2024 13:23	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		595	µS/cm	1	10/21/2024 13:23	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		18.2	°C	1	10/21/2024 13:23	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.90	mg/L	1	10/21/2024 13:23	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		5.20		1	10/21/2024 13:23	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		53	mg/L	1	10/24/2024 11:07	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 11:07	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		385	mg/L	2.5	10/25/2024 15:05	R355294
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50		ND	mg/L	10	10/24/2024 10:18	R355097
Chloride	NELAP	1.0	5.0	J	4.1	mg/L	10	10/24/2024 10:18	R355097
Sulfate	NELAP	3.00	10.0		102	mg/L	10	10/24/2024 10:18	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		26.8	mg/L	1	10/24/2024 18:08	230147
Magnesium	NELAP	0.0055	0.0500		11.3	mg/L	1	10/24/2024 18:08	230147
Potassium	NELAP	0.0400	0.100		0.610	mg/L	1	10/24/2024 18:08	230147
Sodium	NELAP	0.0180	0.0500		32.7	mg/L	1	10/24/2024 18:08	230147
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	11/11/2024 11:13	230147
Arsenic	NELAP	0.0004	0.0010	J	0.0008	mg/L	5	11/02/2024 0:29	230147
Barium	NELAP	0.0007	0.0010		0.0436	mg/L	5	10/31/2024 21:31	230147
Beryllium	NELAP	0.0002	0.0010	J	0.0003	mg/L	5	10/31/2024 21:31	230147
Boron	NELAP	0.0092	0.0250		0.892	mg/L	5	10/31/2024 21:31	230147
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 21:31	230147
Chromium	NELAP	0.0007	0.0015		0.0031	mg/L	5	11/06/2024 22:42	230147
Cobalt	NELAP	0.0001	0.0010		0.0015	mg/L	5	11/06/2024 22:42	230147
Lead	NELAP	0.0006	0.0010		0.0011	mg/L	5	10/31/2024 21:31	230147
Lithium	*	0.0015	0.0030		0.0081	mg/L	5	10/31/2024 21:31	230147
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	10/31/2024 21:31	230147
Selenium	NELAP	0.0006	0.0010		0.0065	mg/L	5	11/02/2024 0:29	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 21:31	230147
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 13:08	230158



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q4

Work Order: 24100635
Report Date: 26-Nov-24

Lab ID: 24100635-012

Client Sample ID: G52D

Matrix: GROUNDWATER

Collection Date: 10/22/2024 12:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		29.90	ft	1	10/22/2024 12:15	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		5.6	NTU	1	10/22/2024 12:15	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		-70	mV	1	10/22/2024 12:15	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		649	µS/cm	1	10/22/2024 12:15	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		15.8	°C	1	10/22/2024 12:15	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.04	mg/L	1	10/22/2024 12:15	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		6.21		1	10/22/2024 12:15	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		184	mg/L	1	10/24/2024 11:12	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 11:12	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		312	mg/L	1	10/25/2024 15:27	R355294
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50		ND	mg/L	10	10/24/2024 10:30	R355097
Chloride	NELAP	1.00	5.00		11.3	mg/L	10	10/24/2024 10:30	R355097
Sulfate	NELAP	3.00	10.0		33.2	mg/L	10	10/24/2024 10:30	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		43.7	mg/L	1	10/24/2024 18:09	230147
Magnesium	NELAP	0.0055	0.0500		13.9	mg/L	1	10/24/2024 18:09	230147
Potassium	NELAP	0.0400	0.100		0.751	mg/L	1	10/24/2024 18:09	230147
Sodium	NELAP	0.0180	0.0500		32.2	mg/L	1	10/24/2024 18:09	230147
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	11/11/2024 11:17	230147
Arsenic	NELAP	0.0004	0.0010		0.0016	mg/L	5	11/02/2024 1:24	230147
Barium	NELAP	0.0007	0.0010		0.291	mg/L	5	10/31/2024 22:38	230147
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 22:38	230147
Boron	NELAP	0.0092	0.0250		0.0251	mg/L	5	10/31/2024 22:38	230147
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 22:38	230147
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	10/31/2024 22:38	230147
Cobalt	NELAP	0.0001	0.0010		0.0041	mg/L	5	11/06/2024 22:48	230147
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 22:38	230147
Lithium	*	0.0015	0.0030		0.0036	mg/L	5	10/31/2024 22:38	230147
Molybdenum	NELAP	0.0006	0.0015	J	0.0011	mg/L	5	11/02/2024 1:24	230147
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 22:38	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 22:38	230147
<i>LCS recovered outside upper control limits for Se. Sample results are below the reporting limit. Data is reportable per the TNI Standard.</i>									
<i>CCV recovered outside the upper control limits for Cr. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 13:10	230158



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q4

Work Order: 24100635
Report Date: 26-Nov-24

Lab ID: 24100635-013

Client Sample ID: G53D

Matrix: GROUNDWATER

Collection Date: 10/22/2024 9:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		39.64	ft	1	10/22/2024 9:08	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		3.9	NTU	1	10/22/2024 9:08	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		61	mV	1	10/22/2024 9:08	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		730	µS/cm	1	10/22/2024 9:08	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		16.2	°C	1	10/22/2024 9:08	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.45	mg/L	1	10/22/2024 9:08	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		6.17		1	10/22/2024 9:08	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		176	mg/L	1	10/24/2024 11:18	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 11:18	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		354	mg/L	1	10/25/2024 15:27	R355294
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50		0.59	mg/L	10	10/24/2024 11:05	R355097
Chloride	NELAP	1.00	5.00		15.5	mg/L	10	10/24/2024 11:05	R355097
Sulfate	NELAP	3.00	10.0		59.0	mg/L	10	10/24/2024 11:05	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		39.6	mg/L	1	10/24/2024 18:11	230147
Magnesium	NELAP	0.0055	0.0500		17.2	mg/L	1	10/24/2024 18:11	230147
Potassium	NELAP	0.0400	0.100		0.291	mg/L	1	10/24/2024 18:11	230147
Sodium	NELAP	0.0180	0.0500		49.1	mg/L	1	10/24/2024 18:11	230147
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	11/11/2024 11:21	230147
Arsenic	NELAP	0.0004	0.0010	J	0.0006	mg/L	5	10/31/2024 22:44	230147
Barium	NELAP	0.0007	0.0010		0.0955	mg/L	5	10/31/2024 22:44	230147
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 22:44	230147
Boron	NELAP	0.0092	0.0250		0.410	mg/L	5	10/31/2024 22:44	230147
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 22:44	230147
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	10/31/2024 22:44	230147
Cobalt	NELAP	0.0001	0.0010	J	0.0010	mg/L	5	11/07/2024 0:26	230147
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 22:44	230147
Lithium	*	0.0015	0.0030	J	0.0017	mg/L	5	10/31/2024 22:44	230147
Molybdenum	NELAP	0.0006	0.0015	J	0.0009	mg/L	5	10/31/2024 22:44	230147
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 22:44	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 22:44	230147
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 13:13	230158

LCS recovered outside upper control limits. Sample results are below the reporting limit. Data is reportable per the TNI Standard.

CCV recovered outside the upper control limits for Cr. Sample results are below the reporting limit. Data is reportable per the TNI standard.



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100635-014
Matrix: GROUNDWATER

Work Order: 24100635
Report Date: 26-Nov-24

Client Sample ID: G54D

Collection Date: 10/22/2024 9:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		44.17	ft	1	10/22/2024 9:25	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		5.6	NTU	1	10/22/2024 9:25	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		18	mV	1	10/22/2024 9:25	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		738	µS/cm	1	10/22/2024 9:25	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		16.3	°C	1	10/22/2024 9:25	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.39	mg/L	1	10/22/2024 9:25	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		6.76		1	10/22/2024 9:25	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		218	mg/L	1	10/24/2024 11:24	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 11:24	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20	H	568	mg/L	1	11/13/2024 15:42	R356185
Sample required re-analysis out of hold time.									
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50		ND	mg/L	10	10/24/2024 11:40	R355097
Chloride	NELAP	1.00	5.00		19.6	mg/L	10	10/24/2024 11:40	R355097
Sulfate	NELAP	3.00	10.0		198	mg/L	10	10/24/2024 11:40	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		92.7	mg/L	1	10/24/2024 18:12	230147
Magnesium	NELAP	0.0055	0.0500		28.0	mg/L	1	10/24/2024 18:12	230147
Potassium	NELAP	0.0400	0.100		1.30	mg/L	1	10/24/2024 18:12	230147
Sodium	NELAP	0.0180	0.0500		50.8	mg/L	1	10/24/2024 18:12	230147
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	11/11/2024 11:25	230147
Arsenic	NELAP	0.0004	0.0010	J	0.0007	mg/L	5	10/31/2024 22:50	230147
Barium	NELAP	0.0007	0.0010		0.0694	mg/L	5	10/31/2024 22:50	230147
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 22:50	230147
Boron	NELAP	0.0092	0.0250		0.752	mg/L	5	10/31/2024 22:50	230147
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 22:50	230147
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	10/31/2024 22:50	230147
Cobalt	NELAP	0.0001	0.0010		0.0090	mg/L	5	11/07/2024 0:32	230147
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 22:50	230147
Lithium	*	0.0015	0.0030		0.0040	mg/L	5	10/31/2024 22:50	230147
Molybdenum	NELAP	0.0006	0.0015	J	0.0007	mg/L	5	10/31/2024 22:50	230147
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 22:50	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 22:50	230147

LCS recovered outside upper control limits. Sample results are below the reporting limit. Data is reportable per the TNI Standard.

CCV recovered outside the upper control limits for Cr. Sample results are below the reporting limit. Data is reportable per the TNI standard.



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100635-014
Matrix: GROUNDWATER

Work Order: 24100635
Report Date: 26-Nov-24
Client Sample ID: G54D
Collection Date: 10/22/2024 9:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 13:15	230158



Client: Ramboll
Client Project: JOP-24Q4

Work Order: 24100635
Report Date: 26-Nov-24

Lab ID: 24100635-015

Client Sample ID: XPW01

Matrix: GROUNDWATER

Collection Date: 10/22/2024 11:31

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		15.94	ft	1	10/22/2024 11:31	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		5.8	NTU	1	10/22/2024 11:31	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		-72	mV	1	10/22/2024 11:31	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		910	µS/cm	1	10/22/2024 11:31	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		19.9	°C	1	10/22/2024 11:31	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.96	mg/L	1	10/22/2024 11:31	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		7.99		1	10/22/2024 11:31	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		117	mg/L	1	10/24/2024 11:31	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 11:31	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		895	mg/L	2.5	10/25/2024 15:30	R355294
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50		ND	mg/L	10	10/24/2024 12:26	R355097
Chloride	NELAP	1.00	5.00		8.88	mg/L	10	10/24/2024 12:26	R355097
Sulfate	NELAP	3.00	10.0		389	mg/L	10	10/24/2024 12:26	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		168	mg/L	1	10/24/2024 18:22	230147
Magnesium	NELAP	0.0055	0.0500		0.238	mg/L	1	10/24/2024 18:22	230147
Potassium	NELAP	0.400	1.00		36.9	mg/L	10	10/25/2024 16:38	230147
Sodium	NELAP	0.0180	0.0500		30.3	mg/L	1	10/24/2024 18:22	230147
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	11/11/2024 11:29	230147
Arsenic	NELAP	0.0004	0.0010		0.0353	mg/L	5	11/02/2024 1:42	230147
Barium	NELAP	0.0007	0.0010		0.129	mg/L	5	10/31/2024 22:56	230147
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 22:56	230147
Boron	NELAP	0.0092	0.0250		11.7	mg/L	5	10/31/2024 22:56	230147
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 22:56	230147
Chromium	NELAP	0.0007	0.0015	J	0.0008	mg/L	5	10/31/2024 22:56	230147
Cobalt	NELAP	0.0001	0.0010	J	0.0005	mg/L	5	11/07/2024 0:38	230147
Lead	NELAP	0.0006	0.0010		0.0021	mg/L	5	10/31/2024 22:56	230147
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	10/31/2024 22:56	230147
Molybdenum	NELAP	0.0006	0.0015		0.253	mg/L	5	10/31/2024 22:56	230147
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 22:56	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 22:56	230147
<i>LCS recovered outside upper control limits for Se. Sample results are below the reporting limit. Data is reportable per the TNI Standard.</i>									
<i>CCV recovered outside the upper control limits for Cr. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 13:17	230158



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q4

Work Order: 24100635
Report Date: 26-Nov-24

Lab ID: 24100635-016

Client Sample ID: XPW02

Matrix: GROUNDWATER

Collection Date: 10/22/2024 11:16

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		5.59	ft	1	10/22/2024 11:16	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		82	NTU	1	10/22/2024 11:16	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		-162	mV	1	10/22/2024 11:16	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		4380	µS/cm	1	10/22/2024 11:16	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		18.3	°C	1	10/22/2024 11:16	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.43	mg/L	1	10/22/2024 11:16	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		7.92		1	10/22/2024 11:16	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		121	mg/L	1	10/24/2024 11:49	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 11:49	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		4460	mg/L	2.5	10/25/2024 15:31	R355294
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50	J	0.37	mg/L	10	10/24/2024 12:38	R355097
Chloride	NELAP	1.00	5.00		6.91	mg/L	10	10/24/2024 12:38	R355097
Sulfate	NELAP	3.00	10.0		2720	mg/L	10	10/24/2024 12:38	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		468	mg/L	1	10/24/2024 18:23	230147
Magnesium	NELAP	0.0055	0.0500		9.80	mg/L	1	10/24/2024 18:23	230147
Potassium	NELAP	0.400	1.00		24.6	mg/L	10	10/25/2024 16:39	230147
Sodium	NELAP	0.0180	0.0500		885	mg/L	1	10/24/2024 18:23	230147
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		0.0115	mg/L	5	11/12/2024 11:37	230147
Arsenic	NELAP	0.0004	0.0010		0.0391	mg/L	5	11/02/2024 1:48	230147
Barium	NELAP	0.0007	0.0010		0.0199	mg/L	5	10/31/2024 23:03	230147
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 23:03	230147
Boron	NELAP	0.0092	0.0250		13.8	mg/L	5	10/31/2024 23:03	230147
Cadmium	NELAP	0.0002	0.0010	J	0.0002	mg/L	5	10/31/2024 23:03	230147
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	10/31/2024 23:03	230147
Cobalt	NELAP	0.0001	0.0010	J	0.0002	mg/L	5	11/07/2024 1:24	230147
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 23:03	230147
Lithium	*	0.0015	0.0030		0.0763	mg/L	5	10/31/2024 23:03	230147
Molybdenum	NELAP	0.0006	0.0015		1.00	mg/L	5	10/31/2024 23:03	230147
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 23:03	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 23:03	230147
<i>LCS recovered outside upper control limits for Se. Sample results are below the reporting limit. Data is reportable per the TNI Standard.</i>									
<i>CCV recovered outside the upper control limits for Cr. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 13:28	230158



Client: Ramboll
Client Project: JOP-24Q4

Work Order: 24100635
Report Date: 26-Nov-24

Lab ID: 24100635-017

Client Sample ID: XPW03

Matrix: GROUNDWATER

Collection Date: 10/22/2024 11:54

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		14.69	ft	1	10/22/2024 11:54	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		6.0	NTU	1	10/22/2024 11:54	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		-94	mV	1	10/22/2024 11:54	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		620	µS/cm	1	10/22/2024 11:54	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		19.1	°C	1	10/22/2024 11:54	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		0.94	mg/L	1	10/22/2024 11:54	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		11.3		1	10/22/2024 11:54	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 12:01	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		102	mg/L	1	10/24/2024 12:01	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		408	mg/L	1	10/25/2024 15:31	R355294
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50	J	0.31	mg/L	10	10/24/2024 12:50	R355097
Chloride	NELAP	1.00	5.00		22.0	mg/L	10	10/24/2024 12:50	R355097
Sulfate	NELAP	3.00	10.0		113	mg/L	10	10/24/2024 12:50	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		8.65	mg/L	1	10/24/2024 18:25	230147
Magnesium	NELAP	0.0055	0.050	J	0.034	mg/L	1	10/24/2024 18:25	230147
Potassium	NELAP	0.400	1.00		24.3	mg/L	10	10/25/2024 16:41	230147
Sodium	NELAP	0.0180	0.0500		91.4	mg/L	1	10/24/2024 18:25	230147
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		0.0251	mg/L	5	11/12/2024 9:53	230147
Arsenic	NELAP	0.0004	0.0010		0.614	mg/L	5	11/02/2024 1:54	230147
Barium	NELAP	0.0007	0.0010		0.0157	mg/L	5	11/01/2024 0:10	230147
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	11/01/2024 0:10	230147
Boron	NELAP	0.0092	0.0250		7.83	mg/L	5	11/01/2024 0:10	230147
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	11/01/2024 0:10	230147
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	11/01/2024 0:10	230147
Cobalt	NELAP	0.0001	0.0010	J	0.0002	mg/L	5	11/07/2024 1:30	230147
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	11/01/2024 0:10	230147
Lithium	*	0.0015	0.0030		0.162	mg/L	5	11/01/2024 0:10	230147
Molybdenum	NELAP	0.0006	0.0015		0.216	mg/L	5	11/01/2024 0:10	230147
Selenium	NELAP	0.0006	0.0010		0.0491	mg/L	5	11/02/2024 1:54	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	11/01/2024 0:10	230147
CCV recovered outside the upper control limits for Cr. Sample results are below the reporting limit. Data is reportable per the TNI standard.									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 13:31	230158



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100635-018
Matrix: GROUNDWATER

Work Order: 24100635
Report Date: 26-Nov-24
Client Sample ID: XSG01
Collection Date: 10/21/2024 14:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		22.56	ft	1	10/21/2024 14:20	R355102



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100635-019
Matrix: GROUNDWATER

Work Order: 24100635
Report Date: 26-Nov-24
Client Sample ID: SG03
Collection Date: 10/21/2024 14:02

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		51.44	ft	1	10/21/2024 14:02	R355102



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100635-020
Matrix: AQUEOUS

Work Order: 24100635
Report Date: 26-Nov-24

Client Sample ID: Field Blank

Collection Date: 10/22/2024 13:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		4	mg/L	1	10/24/2024 12:08	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 12:08	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		38	mg/L	1	10/25/2024 15:31	R355294
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50		ND	mg/L	10	10/24/2024 13:01	R355097
Chloride	NELAP	1.00	5.00		ND	mg/L	10	10/24/2024 13:01	R355097
Sulfate	NELAP	3.00	10.0		ND	mg/L	10	10/24/2024 13:01	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		< 0.100	mg/L	1	10/24/2024 18:27	230147
Magnesium	NELAP	0.0055	0.0500		< 0.0500	mg/L	1	10/24/2024 18:27	230147
Potassium	NELAP	0.0400	0.100		< 0.100	mg/L	1	10/24/2024 18:27	230147
Sodium	NELAP	0.0180	0.0500		< 0.0500	mg/L	1	10/24/2024 18:27	230147
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		0.0012	mg/L	5	11/13/2024 7:59	230147
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/31/2024 23:52	230147
Barium	NELAP	0.0007	0.0010		< 0.0010	mg/L	5	10/31/2024 23:52	230147
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 23:52	230147
Boron	NELAP	0.0092	0.025	J	0.011	mg/L	5	10/31/2024 23:52	230147
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 23:52	230147
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	10/31/2024 23:52	230147
Cobalt	NELAP	0.0001	0.0010		< 0.0010	mg/L	5	11/07/2024 1:35	230147
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 23:52	230147
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	10/31/2024 23:52	230147
Molybdenum	NELAP	0.0006	0.0015	J	0.0007	mg/L	5	10/31/2024 23:52	230147
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 23:52	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 23:52	230147
<i>LCS recovered outside upper control limits. Sample results are below the reporting limit. Data is reportable per the TNI Standard.</i>									
<i>CCV recovered outside the upper control limits for Cr. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 13:33	230158



Laboratory Results

Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100635-021
Matrix: GROUNDWATER

Work Order: 24100635
Report Date: 26-Nov-24

Client Sample ID: G52D Duplicate

Collection Date: 10/22/2024 12:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		29.90	ft	1	10/22/2024 12:15	R355102
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		5.6	NTU	1	10/22/2024 12:15	R355102
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-2000	-2000		-70	mV	1	10/22/2024 12:15	R355102
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		649	µS/cm	1	10/22/2024 12:15	R355102
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		15.8	°C	1	10/22/2024 12:15	R355102
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		1.04	mg/L	1	10/22/2024 12:15	R355102
SW-846 9040B FIELD									
pH	*	0	1.00		6.21		1	10/22/2024 12:15	R355102
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		182	mg/L	1	10/24/2024 12:11	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 12:11	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		312	mg/L	1	10/25/2024 15:31	R355294
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50		ND	mg/L	10	10/24/2024 13:13	R355097
Chloride	NELAP	1.00	5.00		11.3	mg/L	10	10/24/2024 13:13	R355097
Sulfate	NELAP	3.00	10.0		33.1	mg/L	10	10/24/2024 13:13	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		42.8	mg/L	1	10/24/2024 18:28	230147
Magnesium	NELAP	0.0055	0.0500		13.6	mg/L	1	10/24/2024 18:28	230147
Potassium	NELAP	0.0400	0.100		0.737	mg/L	1	10/24/2024 18:28	230147
Sodium	NELAP	0.0180	0.0500		31.6	mg/L	1	10/24/2024 18:28	230147
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		0.0014	mg/L	5	11/11/2024 13:02	230147
Arsenic	NELAP	0.0004	0.0010		0.0019	mg/L	5	11/02/2024 3:43	230147
Barium	NELAP	0.0007	0.0010		0.296	mg/L	5	10/31/2024 23:58	230147
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 23:58	230147
Boron	NELAP	0.0092	0.0250		0.0274	mg/L	5	10/31/2024 23:58	230147
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 23:58	230147
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	10/31/2024 23:58	230147
Cobalt	NELAP	0.0001	0.0010		0.0044	mg/L	5	11/07/2024 1:41	230147
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 23:58	230147
Lithium	*	0.0015	0.0030		0.0033	mg/L	5	10/31/2024 23:58	230147
Molybdenum	NELAP	0.0006	0.0015	J	0.0013	mg/L	5	10/31/2024 23:58	230147
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 23:58	230147
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 23:58	230147
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 13:35	230158

LCS recovered outside upper control limits for Se. Sample results are below the reporting limit. Data is reportable per the TNI Standard.

CCV recovered outside the upper control limits for Cr. Sample results are below the reporting limit. Data is reportable per the TNI standard.



Laboratory Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

Lab ID: 24100635-022

Client Sample ID: Equipment Blank 1

Matrix: AQUEOUS

Collection Date: 10/22/2024 13:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO ₃)	NELAP	0	0		3	mg/L	1	10/24/2024 12:17	R355143
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO ₃)	NELAP	0	0		0	mg/L	1	10/24/2024 12:17	R355143
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		84	mg/L	1	10/25/2024 15:33	R355294
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	NELAP	0.20	0.50		ND	mg/L	10	10/24/2024 13:25	R355097
Chloride	NELAP	1.00	5.00		ND	mg/L	10	10/24/2024 13:25	R355097
Sulfate	NELAP	3.00	10.0		ND	mg/L	10	10/24/2024 13:25	R355097
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		0.520	mg/L	1	10/24/2024 18:44	230148
Magnesium	NELAP	0.0055	0.0500		0.0524	mg/L	1	10/24/2024 18:44	230148
Potassium	NELAP	0.040	0.10	J	0.068	mg/L	1	10/24/2024 18:44	230148
Sodium	NELAP	0.0180	0.0500		0.101	mg/L	1	10/24/2024 18:44	230148
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	JS	0.0008	mg/L	5	11/11/2024 15:11	230148
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/31/2024 23:09	230148
Barium	NELAP	0.0007	0.0010		0.0033	mg/L	5	10/31/2024 23:09	230148
Beryllium	NELAP	0.0002	0.0010	S	< 0.0010	mg/L	5	10/31/2024 23:09	230148
Boron	NELAP	0.0092	0.0250		0.0752	mg/L	5	10/31/2024 23:09	230148
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/31/2024 23:09	230148
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	10/31/2024 23:09	230148
Cobalt	NELAP	0.0001	0.0010		< 0.0010	mg/L	5	11/02/2024 2:06	230148
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/31/2024 23:09	230148
Lithium	*	0.0015	0.0030	J	0.0018	mg/L	5	10/31/2024 23:09	230148
Molybdenum	NELAP	0.0006	0.0015	J	0.0009	mg/L	5	11/02/2024 2:06	230148
Selenium	NELAP	0.0006	0.0010	S	< 0.0010	mg/L	5	10/31/2024 23:09	230148
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/31/2024 23:09	230148
<i>Contamination present in the CCB for Sb. Sample results below the reporting limit are reportable per the TNI Standard.</i>									
<i>Matrix spike recovered outside upper control limits. Sample results are below the reporting limit. Data is reportable.</i>									
<i>LCS recovered outside upper control limits. Sample results are below the reporting limit. Data is reportable per the TNI Standard.</i>									
<i>CCV recovered outside the upper control limits for Cr. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/25/2024 13:37	230158

Sample Summary

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
24100635-001	G01D	Groundwater	3	10/21/2024 11:24
24100635-002	G02D	Groundwater	2	10/21/2024 12:02
24100635-003	G03	Groundwater	2	10/21/2024 12:45
24100635-004	G05	Groundwater	2	10/22/2024 9:46
24100635-005	G06	Groundwater	3	10/22/2024 10:27
24100635-006	G07	Groundwater	3	10/22/2024 10:55
24100635-007	G08	Groundwater	2	10/22/2024 8:22
24100635-008	G09	Groundwater	2	10/22/2024 11:39
24100635-009	G10	Groundwater	2	10/21/2024 15:10
24100635-010	G11	Groundwater	2	10/21/2024 14:10
24100635-011	G51D	Groundwater	2	10/21/2024 13:23
24100635-012	G52D	Groundwater	2	10/22/2024 12:15
24100635-013	G53D	Groundwater	2	10/22/2024 9:08
24100635-014	G54D	Groundwater	2	10/22/2024 9:25
24100635-015	XPW01	Groundwater	2	10/22/2024 11:31
24100635-016	XPW02	Groundwater	2	10/22/2024 11:16
24100635-017	XPW03	Groundwater	2	10/22/2024 11:54
24100635-018	XSG01	Groundwater	1	10/21/2024 14:20
24100635-019	SG03	Groundwater	1	10/21/2024 14:02
24100635-020	Field Blank	Aqueous	3	10/22/2024 13:10
24100635-021	G52D Duplicate	Groundwater	2	10/22/2024 12:15
24100635-022	Equipment Blank 1	Aqueous	2	10/22/2024 13:15



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

STANDARD METHODS 2510 B FIELD

Batch R355102		SampType: LCS		Units $\mu\text{S/cm}$							
SampID: LCS-1-BG											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Spec. Conductance, Field	*	0		1420	1412	0	100.5	90	110	10/23/2024	

Batch R355102		SampType: LCS		Units μS/cm							
SampID: LCS-1-JC											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field		*	0		1410	1412	0	99.7	90	110	10/21/2024

Batch R355102		SampType: LCS		Units μS/cm							
SampID: LCS-2-JC											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Spec. Conductance, Field	*	0		1410	1412	0	99.9	90	110	10/22/2024	

SW-846 9040B FIELD

Batch R355102		SampType: LCS		Units							
SampID: LCS-1-BG											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
pH	*	1.00		7.00	7.000	0	100.0	98.57	101.4	10/23/2024	

Batch R355102		SampType: LCS		Units							
SampID: LCS-1-JC											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
pH	*	1.00		7.02	7.000	0	100.3	98.57	101.4	10/21/2024	

Batch R355102		SampType: LCS		Units							
SampID: LCS-2-JC											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
pH	*	1.00		7.03	7.000	0	100.4	98.57	101.4	10/22/2024	

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R355294		SampType: MBLK		Units mg/L							
SampID: MBLK											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/25/2024	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/25/2024	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/25/2024	



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R355294 SampType: LCS Units mg/L

SampleID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		968	1000	0	96.8	90	110	10/25/2024
Total Dissolved Solids		20		1090	1000	0	109.4	90	110	10/25/2024
Total Dissolved Solids		20		970	1000	0	97.0	90	110	10/25/2024

Batch R355294 SampType: DUP Units mg/L

RPD Limit 10

SampleID: 24100635-001ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		50		360				380.0	5.41	10/25/2024

Batch R355294 SampType: DUP Units mg/L

RPD Limit 10

SampleID: 24102047-001ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		50		2720				2885	6.07	10/25/2024

Batch R355423 SampType: MBLK Units mg/L

SampleID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/29/2024
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/29/2024
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/29/2024
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/29/2024

Batch R355423 SampType: LCS Units mg/L

SampleID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		926	1000	0	92.6	90	110	10/29/2024
Total Dissolved Solids		20		946	1000	0	94.6	90	110	10/29/2024
Total Dissolved Solids		20		984	1000	0	98.4	90	110	10/29/2024
Total Dissolved Solids		20		938	1000	0	93.8	90	110	10/29/2024

Batch R355423 SampType: DUP Units mg/L

RPD Limit 10

SampleID: 24100635-007ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		50	H	730				690.0	5.63	10/29/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R355423		SampType: DUP		Units mg/L		RPD Limit 10					
SampID: 24102240-009BDUP										Date Analyzed	
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Total Dissolved Solids		67		473				506.2	6.80	10/29/2024	

Batch R355423		SampType: DUP		Units mg/L		RPD Limit 10					
SampID: 24102244-010ADUP										Date Analyzed	
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Total Dissolved Solids		50	H	330				335.0	1.50	10/29/2024	

Batch R355423		SampType: DUP		Units mg/L		RPD Limit 10					
SampID: 24102324-001ADUP										Date Analyzed	
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Total Dissolved Solids		20		372				358.0	3.84	10/29/2024	

Batch R356185		SampType: MBLK		Units mg/L							
SampID: MBLK										Date Analyzed	
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	11/13/2024	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	11/13/2024	

Batch R356185		SampType: LCS		Units mg/L							
SampID: LCS										Date Analyzed	
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Total Dissolved Solids		20		968	1000	0	96.8	90	110	11/13/2024	
Total Dissolved Solids		20		1010	1000	0	100.8	90	110	11/13/2024	

Batch R356185		SampType: DUP		Units mg/L		RPD Limit 10					
SampID: 24100635-014ADUP										Date Analyzed	
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Total Dissolved Solids		20	H	550				568.0	3.22	11/13/2024	

Batch R356185		SampType: DUP		Units mg/L		RPD Limit 10					
SampID: 24110016-001ADUP										Date Analyzed	
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Total Dissolved Solids		33		1050				1082	3.45	11/13/2024	



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch	R356185	SampType:	DUP	Units mg/L				RPD Limit 10			
SampleID: 24110581-001ADUP											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Total Dissolved Solids		20	H	312				328.0	5.00	11/13/2024	

SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY

Batch	R355097	SampType:	MBLK	Units mg/L							
SampID: MBLK/ICB											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.05		ND						10/24/2024	
Chloride		0.50		ND						10/24/2024	
Sulfate		1.00		ND						10/24/2024	

Batch R355097		SampType: LCS		Units mg/L						
SampleID: LCS/ICV/QCS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.05		0.98	1.000	0	97.9	90	110	10/24/2024
Chloride		0.50		20.4	20.00	0	101.9	90	110	10/24/2024
Sulfate		1.00		18.7	20.00	0	93.3	90	110	10/24/2024

Batch R355097		SampType: MS		Units mg/L							
SampleID: 24100635-002AMS											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Fluoride		0.50		9.93	10.00	0	99.3	80	120	10/24/2024	
Chloride		5.00		226	200.0	18.64	103.8	80	120	10/24/2024	
Sulfate		10.0		201	200.0	12.99	93.9	80	120	10/24/2024	

Batch	R355097	SampType:	MSD	Units mg/L					RPD Limit 15		
SampID: 24100635-002AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.50		9.98	10.00	0	99.8	9.933	0.46	10/24/2024	
Chloride		5.00		227	200.0	18.64	104.0	226.2	0.25	10/24/2024	
Sulfate		10.0		202	200.0	12.99	94.4	200.8	0.47	10/24/2024	



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY

Batch R355097 SampType: MS Units mg/L

SampleID: 24100635-012AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.50		10.1	10.00	0	100.5	80	120	10/24/2024
Chloride		5.00		217	200.0	11.35	103.1	80	120	10/24/2024
Sulfate		10.0		223	200.0	33.22	94.8	80	120	10/24/2024

Batch R355097 SampType: MSD Units mg/L

RPD Limit 15

SampleID: 24100635-012AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.50		10.1	10.00	0	100.8	10.05	0.31	10/24/2024
Chloride		5.00		218	200.0	11.35	103.2	217.5	0.12	10/24/2024
Sulfate		10.0		223	200.0	33.22	94.7	222.8	0.12	10/24/2024

Batch R355097 SampType: MS Units mg/L

SampleID: 24100635-013AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.50		10.6	10.00	0.5930	99.8	80	120	10/24/2024
Chloride		5.00		223	200.0	15.48	103.6	80	120	10/24/2024
Sulfate		10.0		250	200.0	59.01	95.6	80	120	10/24/2024

Batch R355097 SampType: MSD Units mg/L

RPD Limit 15

SampleID: 24100635-013AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.50		10.6	10.00	0.5930	99.6	10.57	0.17	10/24/2024
Chloride		5.00		222	200.0	15.48	103.1	222.8	0.45	10/24/2024
Sulfate		10.0		249	200.0	59.01	95.1	250.2	0.38	10/24/2024

Batch R355097 SampType: MS Units mg/L

SampleID: 24101488-004BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.50		10.1	10.00	0	100.9	80	120	10/24/2024
Chloride		5.00		311	200.0	93.26	108.9	80	120	10/24/2024
Sulfate		10.0		942	200.0	736.5	102.5	80	120	10/24/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY

Batch R355097		SampType: MSD		Units mg/L				RPD Limit 15		
SampID: 24101488-004BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.50		9.99	10.00	0	99.9	10.09	1.03	10/24/2024
Chloride		5.00		308	200.0	93.26	107.4	311.0	0.96	10/24/2024
Sulfate		10.0		937	200.0	736.5	100.2	941.5	0.48	10/24/2024

Batch R355097		SampType: MS		Units mg/L						
SampID: 24101488-007BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.50		10.0	10.00	0	100.0	80	120	10/24/2024
Chloride		5.00		704	200.0	490.6	106.7	80	120	10/24/2024

Batch R355097		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24101488-007BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride			0.50		10.0	10.00	0	100.4	10.00	0.34	10/24/2024
Chloride			5.00		705	200.0	490.6	107.1	704.0	0.11	10/24/2024

Batch R355097		SampType: MS		Units mg/L						
SampID: 24102244-002AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.25		5.04	5.000	0	100.8	80	120	10/24/2024
Chloride		2.50		108	100.0	4.722	103.2	80	120	10/24/2024
Sulfate		5.00		109	100.0	14.44	94.8	80	120	10/24/2024

Batch R355097		SampType: MSD		Units mg/L				RPD Limit 15		
SampID: 24102244-002AMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.25		5.07	5.000	0	101.3	5.043	0.48	10/24/2024
Chloride		2.50		108	100.0	4.722	103.6	108.0	0.30	10/24/2024
Sulfate		5.00		109	100.0	14.44	95.0	109.3	0.15	10/24/2024

Batch R355097		SampType: MS		Units mg/L						
SampID: 24102244-007AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.25		5.65	5.000	0.5690	101.7	80	120	10/24/2024
Chloride		2.50		108	100.0	4.582	103.5	80	120	10/24/2024
Sulfate		5.00		169	100.0	70.85	97.7	80	120	10/24/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY

Batch R355097		SampType: MSD		Units mg/L				RPD Limit 15		
SampID: 24102244-007AMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.25		5.67	5.000	0.5690	102.0	5.653	0.33	10/24/2024
Chloride		2.50		108	100.0	4.582	103.5	108.1	0.02	10/24/2024
Sulfate		5.00		168	100.0	70.85	97.6	168.5	0.01	10/24/2024

Batch R355975		SampType: MBLK		Units mg/L						
SampID: MBLK/ICB										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.05		ND						11/13/2024
Chloride		0.50		ND						11/13/2024
Sulfate		1.00		ND						11/13/2024

Batch R355975		SampType: LCS		Units mg/L						
SampID: LCS/ICV/QCS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.05		1.01	1.000	0	101.1	90	110	11/13/2024
Chloride		0.50		20.3	20.00	0	101.7	90	110	11/13/2024
Sulfate		1.00		18.5	20.00	0	92.4	90	110	11/13/2024

Batch R355975		SampType: MS		Units mg/L						
SampID: 24102207-012BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.50		10.7	10.00	0.7480	99.6	80	120	11/14/2024
Chloride		5.00		814	200.0	607.3	103.4	80	120	11/14/2024
Sulfate		10.0		194	200.0	7.664	93.3	80	120	11/14/2024

Batch R355975		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 24102207-012BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride			0.50		10.7	10.00	0.7480	99.8	10.71	0.17	11/14/2024
Chloride			5.00		811	200.0	607.3	102.1	814.1	0.32	11/14/2024
Sulfate			10.0		195	200.0	7.664	93.4	194.2	0.17	11/14/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY

Batch R355975 SampType: MS Units mg/L

SampleID: 24110005-006BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.50		10.2	10.00	0	102.1	80	120	11/13/2024
Chloride		5.00		214	200.0	6.632	103.8	80	120	11/13/2024
Sulfate		10.0		212	200.0	23.89	94.3	80	120	11/13/2024

Batch R355975 SampType: MSD Units mg/L

RPD Limit 15

SampleID: 24110005-006BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.50		10.2	10.00	0	101.7	10.21	0.33	11/13/2024
Chloride		5.00		214	200.0	6.632	103.6	214.2	0.19	11/13/2024
Sulfate		10.0		212	200.0	23.89	94.3	212.5	0.02	11/13/2024

Batch R355975 SampType: MS Units mg/L

SampleID: 24110816-002BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.50		10.4	10.00	0	104.0	80	120	11/13/2024
Chloride		5.00		289	200.0	72.18	108.3	80	120	11/13/2024
Sulfate		10.0		277	200.0	85.39	95.8	80	120	11/13/2024

Batch R355975 SampType: MSD Units mg/L

RPD Limit 15

SampleID: 24110816-002BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.50		10.4	10.00	0	103.9	10.40	0.13	11/13/2024
Chloride		5.00		288	200.0	72.18	107.9	288.8	0.24	11/13/2024
Sulfate		10.0		277	200.0	85.39	95.6	276.9	0.10	11/13/2024

Batch R355975 SampType: MS Units mg/L

SampleID: 24110817-002BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.50		10.4	10.00	0.3280	100.9	80	120	11/13/2024
Chloride		5.00		408	200.0	185.4	111.4	80	120	11/13/2024
Sulfate		10.0		186	200.0	0	93.1	80	120	11/13/2024



Quality Control Results

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Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY

Batch R355975		SampType: MSD		Units mg/L				RPD Limit 15		
SampID: 24110817-002BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.50		10.4	10.00	0.3280	101.0	10.42	0.12	11/13/2024
Chloride		5.00		409	200.0	185.4	112.1	408.1	0.34	11/13/2024
Sulfate		10.0		186	200.0	0	93.2	186.1	0.10	11/13/2024

Batch R355975		SampType: MS		Units mg/L						
SampID: 24110933-001AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.50		10.6	10.00	0.3550	102.2	80	120	11/13/2024
Chloride		5.00		686	200.0	465.0	110.3	80	120	11/13/2024
Sulfate		10.0		252	200.0	59.55	96.0	80	120	11/13/2024

Batch R355975		SampType: MSD		Units mg/L				RPD Limit 15		
SampID: 24110933-001AMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.50		10.5	10.00	0.3550	101.6	10.57	0.53	11/13/2024
Chloride		5.00		680	200.0	465.0	107.7	685.6	0.78	11/13/2024
Sulfate		10.0		250	200.0	59.55	95.2	251.6	0.65	11/13/2024

Batch R355975		SampType: MS		Units mg/L						
SampID: 24111011-001AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		50.0		10800	2000	8850	98.6	80	120	11/13/2024

Batch R355975		SampType: MSD		Units mg/L		RPD Limit 15					
SampID: 24111011-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		50.0		10800	2000	8850	97.7	10820	0.17	11/13/2024	

Batch R355975		SampType: MS		Units mg/L						
SampID: 24111013-001AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		50.0		15500	2000	13830	83.2	80	120	11/14/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY

Batch R355975		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed
SampID: 24111013-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Chloride		50.0		15600	2000	13830	90.6	15490	0.95	11/14/2024	

MERCURY BY EPA METHOD 1631E (TOTAL)

Batch 230115		SampType: MBLK		Units ng/L							
SampID: MBLK-230115											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Mercury		0.80		< 0.80	0.4000	0	0	-100	100	10/23/2024	

Batch 230115		SampType: MBLK		Units ng/L							
SampID: MBLK-230115-2											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.80		< 0.80	0.4000	0	0	-100	100	10/23/2024	

Batch 230115		SampType: MBLK		Units ng/L							
SampID: MBLK-230115-3											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.80		< 0.80	0.4000	0	0	-100	100	10/23/2024	

Batch 230115		SampType: LCS		Units ng/L							
SampID: LCS-230115											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Mercury		0.80		4.63	5.000	0	92.6	80	120	10/23/2024	

Batch 230115		SampType: MS		Units ng/L							
SampID: 24101894-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.80		6.25	5.000	1.400	97.0	71	125	10/23/2024	

Batch 230115		SampType: MSD		Units ng/L				RPD Limit 24			
SampID: 24101894-001AMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury			0.80		6.10	5.000	1.400	94.0	6.250	2.43	10/23/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 230147 SampType: MBLK Units mg/L

SampID: MBLK-230147

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	10/24/2024
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	10/24/2024
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	10/24/2024
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	10/24/2024

Batch 230147 SampType: LCS Units mg/L

SampID: LCS-230147

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		2.59	2.500	0	103.5	85	115	10/24/2024
Magnesium		0.0500		2.56	2.500	0	102.3	85	115	10/24/2024
Potassium		0.100		2.78	2.500	0	111.0	85	115	10/24/2024
Sodium		0.0500		2.56	2.500	0	102.6	85	115	10/24/2024

Batch 230147 SampType: MS Units mg/L

SampID: 24100635-001BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		41.2	2.500	38.10	124.8	75	125	10/24/2024
Magnesium		0.0500		13.8	2.500	11.22	104.6	75	125	10/24/2024
Potassium		0.100		4.16	2.500	1.430	109.2	75	125	10/24/2024
Sodium		0.0500	S	76.5	2.500	72.93	141.2	75	125	10/24/2024

Batch 230147 SampType: MSD Units mg/L

RPD Limit 20

SampID: 24100635-001BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100		40.6	2.500	38.10	102.0	41.22	1.39	10/24/2024
Magnesium		0.0500		13.6	2.500	11.22	97.0	13.83	1.39	10/24/2024
Potassium		0.100		4.06	2.500	1.430	105.4	4.159	2.29	10/24/2024
Sodium		0.0500		75.2	2.500	72.93	90.0	76.46	1.69	10/24/2024

Batch 230147 SampType: MS Units mg/L

SampID: 24100635-005BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	84.7	2.500	81.45	131.6	75	125	10/24/2024
Magnesium		0.0500		25.3	2.500	22.72	104.4	75	125	10/24/2024
Potassium		0.100		5.64	2.500	3.138	100.3	75	125	10/24/2024
Sodium		0.0500	S	45.2	2.500	43.36	72.4	75	125	10/24/2024



Quality Control Results

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Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch	230147	SampType:	MSD	Units mg/L				RPD Limit			20
SampID: 24100635-005BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100	S	82.8	2.500	81.45	52.0	84.74	2.38	10/24/2024	
Magnesium		0.0500		24.7	2.500	22.72	78.6	25.32	2.57	10/24/2024	
Potassium		0.100		5.66	2.500	3.138	100.9	5.644	0.29	10/24/2024	
Sodium		0.0500	S	45.1	2.500	43.36	69.6	45.17	0.16	10/24/2024	

Batch 230148 SampType: MBLK Units mg/L

SampID: MBLK-230148											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0500		< 0.0500	0.0068	0	0	-100	100	10/24/2024	
Arsenic		0.0250		< 0.0250	0.0087	0	0	-100	100	10/24/2024	
Barium		0.0025		< 0.0025	0.0007	0	0	-100	100	10/24/2024	
Beryllium		0.0005		< 0.0005	0.0002	0	0	-100	100	10/24/2024	
Boron		0.0200		< 0.0200	0.0090	0	0	-100	100	10/24/2024	
Cadmium		0.0020		< 0.0020	0.0005	0	0	-100	100	10/24/2024	
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	10/24/2024	
Chromium		0.0050		< 0.0050	0.0028	0	0	-100	100	10/24/2024	
Cobalt		0.0050		< 0.0050	0.0020	0	0	-100	100	10/24/2024	
Lead		0.0150		< 0.0150	0.0040	0	0	-100	100	10/24/2024	
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	10/24/2024	
Molybdenum		0.0100		< 0.0100	0.0037	0	0	-100	100	10/24/2024	
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	10/24/2024	
Selenium		0.0400		< 0.0400	0.0170	0	0	-100	100	10/24/2024	
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	10/24/2024	
Thallium		0.0500		< 0.0500	0.0111	0	0	-100	100	10/24/2024	



Quality Control Results

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Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 230148 SampType: LCS Units mg/L

SampID: LCS-230148

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0500		0.507	0.5000	0	101.4	85	115	10/24/2024
Arsenic		0.0250		0.496	0.5000	0	99.2	85	115	10/24/2024
Barium		0.0025		1.93	2.000	0	96.5	85	115	10/24/2024
Beryllium		0.0005		0.0502	0.0500	0	100.4	85	115	10/24/2024
Boron		0.0200		0.477	0.5000	0	95.3	85	115	10/24/2024
Cadmium		0.0020		0.0473	0.0500	0	94.6	85	115	10/24/2024
Calcium		0.100		2.52	2.500	0	100.6	85	115	10/24/2024
Chromium		0.0050		0.201	0.2000	0	100.3	85	115	10/24/2024
Cobalt		0.0050		0.520	0.5000	0	104.1	85	115	10/24/2024
Lead		0.0150		0.494	0.5000	0	98.8	85	115	10/24/2024
Magnesium		0.0500		2.49	2.500	0	99.7	85	115	10/24/2024
Molybdenum		0.0100		0.495	0.5000	0	99.0	85	115	10/24/2024
Potassium		0.100		2.70	2.500	0	108.1	85	115	10/24/2024
Selenium		0.0400		0.482	0.5000	0	96.3	85	115	10/24/2024
Sodium		0.0500		2.50	2.500	0	100.2	85	115	10/24/2024
Thallium		0.0500		0.240	0.2500	0	95.9	85	115	10/24/2024

Batch 230148 SampType: MS Units mg/L

SampID: 24100635-022BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		3.07	2.500	0.5200	102.2	75	125	10/24/2024
Magnesium		0.0500		2.57	2.500	0.05240	100.7	75	125	10/24/2024
Potassium		0.100		2.80	2.500	0.06790	109.3	75	125	10/24/2024
Sodium		0.0500		2.64	2.500	0.1008	101.4	75	125	10/24/2024

Batch 230148 SampType: MSD Units mg/L

RPD Limit 20

SampID: 24100635-022BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100		3.09	2.500	0.5200	103.0	3.075	0.65	10/24/2024
Magnesium		0.0500		2.61	2.500	0.05240	102.5	2.570	1.69	10/24/2024
Potassium		0.100		2.83	2.500	0.06790	110.7	2.801	1.20	10/24/2024
Sodium		0.0500		2.67	2.500	0.1008	102.9	2.636	1.39	10/24/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 230147 SampType: MBLK Units mg/L
SampID: MBLK-230147

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	11/11/2024
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	10/31/2024
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	10/31/2024
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	10/31/2024
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	10/31/2024
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	10/31/2024
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	10/31/2024
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	11/06/2024
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	10/31/2024
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	10/31/2024
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	10/31/2024
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	10/31/2024
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	10/31/2024

Batch 230147 SampType: LCS Units mg/L
SampID: LCS-230147

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		1.12	1.000	0	112.5	80	120	11/08/2024
Arsenic		0.0010		0.561	0.5000	0	112.1	80	120	11/06/2024
Arsenic		0.0010		0.549	0.5000	0	109.8	80	120	11/01/2024
Arsenic		0.0010	S	0.606	0.5000	0	121.2	80	120	10/31/2024
Barium		0.0010		1.87	2.000	0	93.7	80	120	10/31/2024
Beryllium		0.0010		0.0588	0.0500	0	117.5	80	120	10/31/2024
Boron		0.0250		0.576	0.5000	0	115.1	80	120	10/31/2024
Cadmium		0.0010		0.0530	0.0500	0	106.0	80	120	10/31/2024
Chromium		0.0015		0.240	0.2000	0	119.8	80	120	10/31/2024
Lead		0.0010		0.573	0.5000	0	114.7	80	120	10/31/2024
Lithium	*	0.0030		0.569	0.5000	0	113.7	80	120	10/31/2024
Molybdenum		0.0015		0.402	0.5000	0	80.4	80	120	10/31/2024
Selenium		0.0010	S	0.650	0.5000	0	130.0	80	120	10/31/2024
Selenium		0.0010		0.587	0.5000	0	117.3	80	120	11/01/2024
Selenium		0.0010		0.578	0.5000	0	115.7	80	120	11/06/2024
Thallium		0.0020		0.266	0.2500	0	106.4	80	120	10/31/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 230147 SampType: MS Units mg/L

SampID: 24100635-001BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.768	1.000	0	76.8	75	125	11/11/2024
Arsenic		0.0010		0.598	0.5000	0.0006627	119.4	75	125	10/31/2024
Barium		0.0010		2.20	2.000	0.2083	99.5	75	125	10/31/2024
Beryllium		0.0010		0.0606	0.0500	0	121.3	75	125	10/31/2024
Boron		0.0250		0.617	0.5000	0.02260	118.8	75	125	10/31/2024
Cadmium		0.0010		0.0579	0.0500	0	115.8	75	125	10/31/2024
Chromium		0.0015		0.237	0.2000	0.002547	117.3	75	125	11/06/2024
Cobalt		0.0010		0.588	0.5000	0.001146	117.4	75	125	11/06/2024
Lead		0.0010		0.573	0.5000	0.0007377	114.4	75	125	10/31/2024
Lithium	*	0.0030		0.595	0.5000	0.001819	118.7	75	125	10/31/2024
Molybdenum		0.0015		0.479	0.5000	0.0007221	95.6	75	125	10/31/2024
Thallium		0.0020		0.264	0.2500	0	105.6	75	125	10/31/2024

Batch 230147 SampType: MSD Units mg/L

RPD Limit 20

SampID: 24100635-001BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		0.756	1.000	0	75.6	0.7677	1.51	11/11/2024
Arsenic		0.0010		0.601	0.5000	0.0006627	120.1	0.5979	0.58	10/31/2024
Barium		0.0010		2.16	2.000	0.2083	97.7	2.198	1.61	10/31/2024
Beryllium		0.0010		0.0605	0.0500	0	121.1	0.06064	0.18	10/31/2024
Boron		0.0250		0.615	0.5000	0.02260	118.5	0.6165	0.21	10/31/2024
Cadmium		0.0010		0.0545	0.0500	0	109.0	0.05790	6.03	10/31/2024
Chromium		0.0015		0.240	0.2000	0.002547	118.6	0.2371	1.09	11/06/2024
Cobalt		0.0010		0.607	0.5000	0.001146	121.1	0.5880	3.11	11/06/2024
Lead		0.0010		0.578	0.5000	0.0007377	115.4	0.5726	0.92	10/31/2024
Lithium	*	0.0030		0.591	0.5000	0.001819	117.8	0.5954	0.81	10/31/2024
Molybdenum		0.0015		0.509	0.5000	0.0007221	101.6	0.4789	6.03	10/31/2024
Thallium		0.0020		0.267	0.2500	0	106.9	0.2639	1.30	10/31/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 230147 SampType: MS Units mg/L

SampleID: 24100635-005BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.777	1.000	0.0005124	77.7	75	125	11/12/2024
Arsenic		0.0010		0.561	0.5000	0.003115	111.5	75	125	11/01/2024
Barium		0.0010		1.85	2.000	0.05189	90.0	75	125	10/31/2024
Beryllium		0.0010		0.0582	0.0500	0.0004307	115.6	75	125	10/31/2024
Boron		0.0250		3.81	0.5000	3.335	95.2	75	125	10/31/2024
Cadmium		0.0010		0.0525	0.0500	0	105.0	75	125	10/31/2024
Chromium		0.0015		0.238	0.2000	0.01432	112.1	75	125	11/06/2024
Cobalt		0.0010		0.568	0.5000	0.003288	112.9	75	125	11/06/2024
Lead		0.0010		0.570	0.5000	0.004045	113.2	75	125	10/31/2024
Lithium	*	0.0030		0.572	0.5000	0.007794	112.9	75	125	10/31/2024
Molybdenum		0.0015		0.461	0.5000	0.0009294	92.1	75	125	10/31/2024
Selenium		0.0010		0.585	0.5000	0	117.1	75	125	10/31/2024
Thallium		0.0020		0.263	0.2500	0	105.2	75	125	10/31/2024

Batch 230147 SampType: MSD Units mg/L

RPD Limit 20

SampleID: 24100635-005BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		0.796	1.000	0.0005124	79.6	0.7772	2.43	11/12/2024
Arsenic		0.0010		0.559	0.5000	0.003115	111.2	0.5606	0.23	11/01/2024
Barium		0.0010		1.97	2.000	0.05189	95.9	1.852	6.13	10/31/2024
Beryllium		0.0010		0.0593	0.0500	0.0004307	117.7	0.05822	1.78	10/31/2024
Boron		0.0250		3.86	0.5000	3.335	105.6	3.811	1.37	10/31/2024
Cadmium		0.0010		0.0553	0.0500	0	110.7	0.05250	5.24	10/31/2024
Chromium		0.0015		0.247	0.2000	0.01432	116.3	0.2385	3.50	11/06/2024
Cobalt		0.0010		0.584	0.5000	0.003288	116.2	0.5676	2.91	11/06/2024
Lead		0.0010		0.587	0.5000	0.004045	116.6	0.5702	2.95	10/31/2024
Lithium	*	0.0030		0.578	0.5000	0.007794	114.1	0.5723	1.07	10/31/2024
Molybdenum		0.0015		0.421	0.5000	0.0009294	83.9	0.4614	9.25	10/31/2024
Selenium		0.0010		0.617	0.5000	0	123.4	0.5853	5.25	10/31/2024
Thallium		0.0020		0.265	0.2500	0	106.1	0.2630	0.84	10/31/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 230148 SampType: MBLK Units mg/L
SampID: MBLK-230148

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	11/12/2024
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	11/11/2024
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	10/25/2024
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	10/25/2024
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	10/31/2024
Boron	*	0.0250		< 0.0250	0.0093	0	0	-100	100	10/31/2024
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	10/25/2024
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	10/25/2024
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	10/25/2024
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	10/31/2024
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	10/25/2024
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	10/25/2024
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	10/25/2024

Batch 230148 SampType: LCS Units mg/L
SampID: LCS-230148

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.999	1.000	0	99.9	85	115	11/12/2024
Arsenic		0.0010		0.556	0.5000	0	111.3	85	115	10/25/2024
Barium		0.0010		2.24	2.000	0	112.0	85	115	10/25/2024
Beryllium		0.0010		0.0539	0.0500	0	107.7	85	115	11/02/2024
Beryllium		0.0010	S	0.0584	0.0500	0	116.9	85	115	10/31/2024
Boron	*	0.0250		0.573	0.5000	0	114.7	85	115	10/31/2024
Cadmium		0.0010		0.0539	0.0500	0	107.7	85	115	10/25/2024
Chromium		0.0015		0.212	0.2000	0	106.0	85	115	10/25/2024
Cobalt		0.0010		0.526	0.5000	0	105.2	85	115	10/25/2024
Lead		0.0010	SE	0.581	0.5000	0	116.3	85	115	10/31/2024
Lead		0.0010	E	0.518	0.5000	0	103.6	85	115	11/02/2024
Lithium	*	0.0030		0.554	0.5000	0	110.7	85	115	10/25/2024
Molybdenum		0.0015		0.487	0.5000	0	97.5	85	115	10/25/2024
Thallium		0.0020		0.249	0.2500	0	99.5	85	115	10/25/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 230148 SampType: MS Units mg/L

SampID: 24100635-022BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010	S	0.744	0.5000	0.0007868	148.7	75	125	11/11/2024
Arsenic		0.0010		0.613	0.5000	0	122.7	75	125	10/31/2024
Barium		0.0010		1.98	2.000	0.003275	98.9	75	125	10/31/2024
Beryllium		0.0010		0.0617	0.0500	0	123.3	75	125	10/31/2024
Boron		0.0250		0.631	0.5000	0.07516	111.1	75	125	10/31/2024
Cadmium		0.0010		0.0562	0.0500	0	112.4	75	125	10/31/2024
Chromium		0.0015		0.241	0.2000	0	120.5	75	125	10/31/2024
Cobalt		0.0010		0.557	0.5000	0	111.3	75	125	11/02/2024
Lead		0.0010		0.591	0.5000	0	118.2	75	125	10/31/2024
Lithium	*	0.0030		0.598	0.5000	0.001784	119.3	75	125	10/31/2024
Molybdenum		0.0015		0.480	0.5000	0.0008662	95.8	75	125	11/02/2024
Selenium		0.0010	S	0.669	0.5000	0	133.9	75	125	10/31/2024
Thallium		0.0020		0.275	0.2500	0	110.1	75	125	10/31/2024

Batch 230148 SampType: MSD Units mg/L

RPD Limit 20

SampID: 24100635-022BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010	S	0.755	0.5000	0.0007868	150.8	0.7442	1.42	11/11/2024
Arsenic		0.0010		0.615	0.5000	0	123.0	0.6135	0.28	10/31/2024
Barium		0.0010		1.97	2.000	0.003275	98.2	1.982	0.75	10/31/2024
Beryllium		0.0010	S	0.0626	0.0500	0	125.3	0.06166	1.60	10/31/2024
Boron		0.0250		0.628	0.5000	0.07516	110.6	0.6309	0.45	10/31/2024
Cadmium		0.0010		0.0526	0.0500	0	105.3	0.05619	6.53	10/31/2024
Chromium		0.0015		0.246	0.2000	0	122.9	0.2410	2.00	10/31/2024
Cobalt		0.0010		0.571	0.5000	0	114.2	0.5566	2.58	11/02/2024
Lead		0.0010		0.611	0.5000	0	122.1	0.5912	3.24	10/31/2024
Lithium	*	0.0030		0.605	0.5000	0.001784	120.7	0.5981	1.15	10/31/2024
Molybdenum		0.0015		0.521	0.5000	0.0008662	104.1	0.4797	8.29	11/02/2024
Selenium		0.0010	S	0.668	0.5000	0	133.7	0.6694	0.15	10/31/2024
Thallium		0.0020		0.285	0.2500	0	113.8	0.2751	3.37	10/31/2024

Batch 230148 SampType: MS Units mg/L

SampID: 24100635-026BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Boron		0.0250	S	11.6	0.5000	11.30	64.7	75	125	11/01/2024



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 230148		SampType: MSD		Units mg/L				RPD Limit 20			
SampID: 24100635-026BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Boron		0.0250		11.8	0.5000	11.30	91.7	11.63	1.16	11/01/2024	

Batch 230661		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-230661											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	11/11/2024	
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	11/08/2024	

Batch 230661		SampType: LCS		Units mg/L							
SampID: LCS-230661											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Selenium		0.0010		1.02	1.000	0	101.7	85	115	11/08/2024	

Batch 230661		SampType: MS		Units mg/L							
SampID: 24100635-001BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Selenium		0.0010		1.04	1.000	0.001315	104.0	75	125	11/08/2024	

Batch 230661		SampType: MSD		Units mg/L				RPD Limit 20			
SampID: 24100635-001BMSD											
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Selenium			0.0010		1.05	1.000	0.001315	104.9	1.041	0.85	11/08/2024

SW-846 7470A (TOTAL)

Batch 230158		SampType: MBLK		Units mg/L							
SampID: MBLK-230158											Date Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Mercury		0.00020		< 0.00020	0.0001	0	0	-100	100	10/25/2024	

Batch 230158		SampType: LCS		Units mg/L							
SampID: LCS-230158											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00456	0.0050	0	91.3	85	115	10/25/2024	



Quality Control Results

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100635

Client Project: JOP-24Q4

Report Date: 26-Nov-24

SW-846 7470A (TOTAL)

Batch 230158 SampType: MS Units mg/L

SampleID: 24100635-008BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00457	0.0050	0	91.4	75	125	10/25/2024

Batch 230158 SampType: MSD Units mg/L

RPD Limit 15

SampleID: 24100635-008BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		0.00439	0.0050	0	87.8	0.004570	3.98	10/25/2024

Batch 230158 SampType: MS Units mg/L

SampleID: 24100635-015BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00450	0.0050	0	90.0	75	125	10/25/2024

Batch 230158 SampType: MSD Units mg/L

RPD Limit 15

SampleID: 24100635-015BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		0.00443	0.0050	0	88.6	0.004501	1.54	10/25/2024



Receiving Check List

<http://www.teklabinc.com/>

Client: Ramboll
Client Project: JOP-24Q4

Work Order: 24100635
Report Date: 26-Nov-24

Carrier: Justin Colp

Received By: AMD

Completed by:

On:

23-Oct-24

Amber Dilallo

Amber Dilallo

Reviewed by:

On:

23-Oct-24

Elizabeth A. Hurley

Elizabeth A. Hurley

Pages to follow:

Chain of custody

2

Extra pages included

0

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C 5.1

Type of thermal preservation?

None ☐

Ice ☒

Blue Ice ☐

Dry Ice ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☒

Lab ☐

NA ☐

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water – at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

Any No responses must be detailed below or on the COC.

Samples were preserved with bromine chloride (100488) for low level mercury analysis upon arrival at the laboratory.

pH strip #96651. - JD/amberdilallo - 10/23/2024 9:00:32 AM

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

24100635

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 1 of 2	
Company: Vistra Corp-Joppa		Report To: Brian Voelker		Attention: Brian Voelker			
Address: 2100 Portland Road		Copy To: Roger Faughn - roger.faughn@vistracorp.com		Company Name: Vistra Corp			
Joppa, IL 62953				Address: see Section A			
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:			
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:			
Requested Due Date/TAT: 10 day		Project Number:		Profile #:			
						REGULATORY AGENCY	
						NPDES GROUND WATER DRINKING WATER	
						UST RCRA OTHER	
						Site Location	
						STATE: IL	

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test	Requested Analysis Filtered (Y/N)												Residual Chlorine (Y/N)	Project No./ Lab I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		JOP-257-401	JOP-845-401	JOP-SUP-000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														</

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER: J. Colp		DATE Signed (MM/DD/YY): 10-21-24	
SIGNATURE of SAMPLER: [Signature]			

PH 96651

JD 10/23/24

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 2

[illegible]

16		17		18		19		20		21		22		23		24		25		26		27		28		29		30		31		32		33		34		35		36		37		38		39		40		41		42		43		44		45		46		47		48		49		50		51		52		53		54		55		56		57		58		59		60		61		62		63		64		65		66		67		68		69		70		71		72		73		74		75		76		77		78		79		80		81		82		83		84		85		86		87		88		89		90		91		92		93		94		95		96		97		98		99		100	
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS																																																																																																																																																											
JOP-24Q4 Rev 2		J. Galt		10/22		1620		Ember Oullets		10/22/14		1620																																																																																																																																																													

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Justin Cap					
SIGNATURE of SAMPLER: [Signature]	DATE Signed (MM/DD/YY): 10-27-24				

November 25, 2024

Eric Bauer
Ramboll
234 W. Florida Street
Fifth Floor
Milwaukee, WI 53204
TEL: (414) 837-3607
FAX: (414) 837-3608



Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: JOP-24Q4

WorkOrder: 24100636

Dear Eric Bauer:

TEKLAB, INC received 19 samples on 10/22/2024 4:20:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Elizabeth A. Hurley
Director of Customer Service
(618)344-1004 ex 33
ehurley@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100636

Client Project: JOP-24Q4

Report Date: 25-Nov-24

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Sample Summary	24
Receiving Check List	25
Chain of Custody	Appended

Definitions

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100636

Client Project: JOP-24Q4

Report Date: 25-Nov-24

Abbr Definition

* Analytes on report marked with an asterisk are not NELAP accredited

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.

DNI Did not ignite

DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

TNTC Too numerous to count (> 200 CFU)



Definitions

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100636

Client Project: JOP-24Q4

Report Date: 25-Nov-24

Qualifiers

# - Unknown hydrocarbon	B - Analyte detected in associated Method Blank
C - RL shown is a Client Requested Quantitation Limit	E - Value above quantitation range
H - Holding times exceeded	I - Associated internal standard was outside method criteria
J - Analyte detected below quantitation limits	M - Manual Integration used to determine area response
ND - Not Detected at the Reporting Limit	R - RPD outside accepted recovery limits
S - Spike Recovery outside recovery limits	T - TIC(Tentatively identified compound)
X - Value exceeds Maximum Contaminant Level	



Case Narrative

<http://www.teklabinc.com/>

Client: Ramboll
Client Project: JOP-24Q4

Work Order: 24100636
Report Date: 25-Nov-24

Cooler Receipt Temp: 5.1 °C

An employee of Teklab, Inc. collected the sample(s).

Equipment Blanks 2 and 3 were not needed.

Ra226/228 analyses were performed by Eurofins St. Louis. See attached report for results and QC.

This report was revised on November 25, 2024 per Eric Bauer's request. The reason for the revision is to include combined Ra226/228 data. Please replace report dated November 20, 2024 with this report. EAH 11/25/24

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com



Accreditations

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100636

Client Project: JOP-24Q4

Report Date: 25-Nov-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Illinois	IEPA	1004652024-2	NELAP	4/30/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2025	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2025	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2025	Collinsville
Oklahoma	ODEQ	9978	NELAP	12/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2025	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2026	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Mississippi	MSDH			4/30/2025	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100636-001
Matrix: GROUNDWATER

Work Order: 24100636
Report Date: 25-Nov-24
Client Sample ID: G01D
Collection Date: 10/21/2024 11:24

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	11/12/2024 12:07	R356428



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100636-002
Matrix: GROUNDWATER

Work Order: 24100636
Report Date: 25-Nov-24
Client Sample ID: G02D
Collection Date: 10/21/2024 12:02

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	11/12/2024 12:07	R356428



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100636-003
Matrix: GROUNDWATER

Work Order: 24100636
Report Date: 25-Nov-24
Client Sample ID: G03
Collection Date: 10/21/2024 12:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	11/12/2024 12:07	R356428



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100636-004
Matrix: GROUNDWATER

Work Order: 24100636
Report Date: 25-Nov-24
Client Sample ID: G05
Collection Date: 10/22/2024 9:46

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	11/12/2024 12:07	R356428



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100636-005
Matrix: GROUNDWATER

Work Order: 24100636
Report Date: 25-Nov-24
Client Sample ID: G06
Collection Date: 10/22/2024 10:27

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	11/12/2024 12:08	R356428



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100636-006
Matrix: GROUNDWATER

Work Order: 24100636
Report Date: 25-Nov-24
Client Sample ID: G07
Collection Date: 10/22/2024 10:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	11/12/2024 12:08	R356428



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100636-007
Matrix: GROUNDWATER

Work Order: 24100636
Report Date: 25-Nov-24
Client Sample ID: G08
Collection Date: 10/22/2024 8:22

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	11/12/2024 12:08	R356428



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100636-008
Matrix: GROUNDWATER

Work Order: 24100636
Report Date: 25-Nov-24
Client Sample ID: G09
Collection Date: 10/22/2024 11:39

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	11/12/2024 12:08	R356428



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100636-009
Matrix: GROUNDWATER

Work Order: 24100636
Report Date: 25-Nov-24
Client Sample ID: G10
Collection Date: 10/21/2024 15:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	11/12/2024 12:08	R356428



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100636-010
Matrix: GROUNDWATER

Work Order: 24100636
Report Date: 25-Nov-24
Client Sample ID: G11
Collection Date: 10/21/2024 14:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	11/12/2024 12:08	R356428



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100636-011
Matrix: GROUNDWATER

Work Order: 24100636
Report Date: 25-Nov-24
Client Sample ID: G51D
Collection Date: 10/21/2024 13:23

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	11/12/2024 12:08	R356428



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100636-012
Matrix: GROUNDWATER

Work Order: 24100636
Report Date: 25-Nov-24
Client Sample ID: G52D
Collection Date: 10/22/2024 12:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	11/12/2024 12:08	R356428



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100636-013
Matrix: GROUNDWATER

Work Order: 24100636
Report Date: 25-Nov-24
Client Sample ID: G53D
Collection Date: 10/22/2024 9:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	11/12/2024 12:06	R356428



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100636-014
Matrix: GROUNDWATER

Work Order: 24100636
Report Date: 25-Nov-24
Client Sample ID: G54D
Collection Date: 10/22/2024 9:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	11/12/2024 12:06	R356428



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100636-015
Matrix: AQUEOUS

Work Order: 24100636
Report Date: 25-Nov-24
Client Sample ID: Field Blank
Collection Date: 10/22/2024 13:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	11/12/2024 12:06	R356428



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100636-016
Matrix: GROUNDWATER

Work Order: 24100636
Report Date: 25-Nov-24
Client Sample ID: G52D Duplicate
Collection Date: 10/22/2024 12:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	11/12/2024 12:06	R356428



Client: Ramboll
Client Project: JOP-24Q4
Lab ID: 24100636-017
Matrix: AQUEOUS

Work Order: 24100636
Report Date: 25-Nov-24
Client Sample ID: Equipment Blank 1
Collection Date: 10/22/2024 13:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SEE ATTACHED FOR SUBCONTRACTING ANALYSIS									
Subcontracted Analysis	*	0	0		See Attached		1	11/12/2024 12:06	R356428



Sample Summary

<http://www.teklabinc.com/>

Client: Ramboll

Work Order: 24100636

Client Project: JOP-24Q4

Report Date: 25-Nov-24

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
24100636-001	G01D	Groundwater	1	10/21/2024 11:24
24100636-002	G02D	Groundwater	1	10/21/2024 12:02
24100636-003	G03	Groundwater	1	10/21/2024 12:45
24100636-004	G05	Groundwater	1	10/22/2024 9:46
24100636-005	G06	Groundwater	1	10/22/2024 10:27
24100636-006	G07	Groundwater	1	10/22/2024 10:55
24100636-007	G08	Groundwater	1	10/22/2024 8:22
24100636-008	G09	Groundwater	1	10/22/2024 11:39
24100636-009	G10	Groundwater	1	10/21/2024 15:10
24100636-010	G11	Groundwater	1	10/21/2024 14:10
24100636-011	G51D	Groundwater	1	10/21/2024 13:23
24100636-012	G52D	Groundwater	1	10/22/2024 12:15
24100636-013	G53D	Groundwater	1	10/22/2024 9:08
24100636-014	G54D	Groundwater	1	10/22/2024 9:25
24100636-015	Field Blank	Aqueous	1	10/22/2024 13:10
24100636-016	G52D Duplicate	Groundwater	1	10/22/2024 12:15
24100636-017	Equipment Blank 1	Aqueous	1	10/22/2024 13:15
24100636-018	Equipment Blank 2	Aqueous	1	
24100636-019	Equipment Blank 3	Aqueous	1	



Receiving Check List

<http://www.teklabinc.com/>

Client: Ramboll
Client Project: JOP-24Q4

Work Order: 24100636
Report Date: 25-Nov-24

Carrier: Justin Colp

Received By: AMD

Completed by:

On:

23-Oct-24

Amber Dilallo

Amber Dilallo

Reviewed by:

On:

23-Oct-24

Elizabeth A. Hurley

Elizabeth A. Hurley

Pages to follow:

Chain of custody

2

Extra pages included

26

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C 5.1

Type of thermal preservation?

None ☐

Ice ☒

Blue Ice ☐

Dry Ice ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☐

Lab ☐

NA ☒

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water – at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

Any No responses must be detailed below or on the COC.

pH strip #96651. - amberdilallo - 10/23/2024 9:01:51 AM

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

24100636

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 1 of 2	
Company: Vistra Corp-Joppa		Report To: Brian Voelker		Attention: Brian Voelker		REGULATORY AGENCY NPDES GROUND WATER DRINKING WATER UST RCRA OTHER Site Location: IL STATE:	
Address: 2100 Portland Road		Copy To: Roger Faughn - roger.faughn@visstracorp.com		Company Name: Vistra Corp			
Joppa, IL 62953				Address: see Section A			
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:			
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:			
Requested Due Date/TAT: 10 day		Project Number:		Profile #:			

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL CL WIPE WP AIR AR OTHER OT TISUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test Y/N	Requested Analysis Filtered (Y/N)												Residual Chlorine (Y/N)	Project No./ Lab I.D.
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		JOP-257-401	JOP-845-401												
1	G01D	WT	G	10-21-24	1124	2		2							X	X												24100636-001			
2	G02D	WT	G	10-21-24	1207	2		2							X	X												24100636-002			
3	G03	WT	G	10-21-24	1245	2		2							X	X												24100636-003			
4	G05	WT	G	10-22-24	0946	2		2							X	X												24100636-004			
5	G06	WT	G	10-22-24	1027	2		2							X	X												24100636-005			
6	G07	WT	G	10-22-24	1055	2		2							X	X												24100636-006			
7	G08	WT	G	10-22-24	0822	2		2							X	X												24100636-007			
8	G09	WT	G	10-22-24	1139	2		2							X	X												24100636-008			
9	G10	WT	G	10-21-24	1510	2		2							X	X												24100636-009			
10	G11	WT	G	10-21-24	1410	2		2							X	X												24100636-010			
11	G51D	WT	G	10-21-24	1323	2		2							X	X												24100636-011			
12	G52D	WT	G	10-22-24	1215	2		2							X	X												24100636-012			
13	G53D	WT	G	10-22-24	0908	2		2							X	X												24100636-013			
14	G54D	WT	G	10-22-24	925	2		2							X	X												24100636-014			
15	XPW01	WT	G	10-22-24	5231131	0									X	X												N/A			
16	XPW02	WT	G	10-22-24	1110	0									X	X												N/A			
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	SAMPLE CONDITIONS																					
JOP-24Q4 Rev 1		J. Colp		10-22	1620	Justin Colp		10/21/24	1620	5.1		Y		Z																	
SAMPLER NAME AND SIGNATURE										Temp in °C		Received on Ice (Y/N)		Custody Sealed Cooler (Y/N)		Samples Intact (Y/N)															
PRINT Name of SAMPLER: Justin Colp																															
SIGNATURE of SAMPLER: [Signature]										DATE Signed (MM/DD/YY): 10-21-24																					

PH 7.96251 um

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

24100636

Page: 2 of 2

ITEM #	Section D Required Client Information	Valid Matrix Codes		MATRIX CODE	CODE	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test	Requested Analysis Filtered (Y/N)																Ra226/228, only		
		MATRIX	C=COMP			DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		JOP-257-401	JOP-845-401																	
1	XPW03	WT	G	10-22-24	1234			0								X	X												N/A								
2	XSG01	WT	G					0								X	X												N/A								
3	SG03	WT	G					0								X	X												N/A								
4	Field Blank	WT	G	10-22-24	1310			2		2						X	X												24100636-015								
5	G52D Duplicate	WT	G	10-22-24	1215			2		2						X	X												24100636-016								
6	Equipment Blank 1	WT	G	10-22-24	1315			2		2						X	X												24100636-017								
7	Equipment Blank 2	WT	G					2		2						X	X												24100636-018								
8	Equipment Blank 3	WT	G					2		2						X	X												24100636-019								
9																																					
10																																					
11																																					
12																																					
13																																					
14																																					
15																																					
16																																					
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION			DATE		TIME		ACCEPTED BY / AFFILIATION			DATE		TIME		SAMPLE CONDITIONS																					
JOP-24Q4 Rev 1		J. Cole			10-22		1620		Union Oil Co			10/24/2020				> z																					

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Justin Cole SIGNATURE of SAMPLER: <i>[Signature]</i>				
DATE Signed (MM/DD/YY): 10-22-24					

ANALYTICAL REPORT

PREPARED FOR

Attn: Elizabeth A Hurley
TekLab, Inc
5445 Horseshoe Lake Road
Collinsville, Illinois 62234

Generated 11/25/2024 10:07:28 AM Revision 1

JOB DESCRIPTION

Radium-226 and Radium-228
24100636

JOB NUMBER

160-55941-1

Job Notes

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

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

Authorization



Generated
11/25/2024 10:07:28 AM
Revision 1

Authorized for release by
Erika Smith, Project Manager
erika.smith@et.eurofinsus.com
(314)298-8566

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

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Client: TekLab, Inc
Project: Radium-226 and Radium-228

Job ID: 160-55941-1

Job ID: 160-55941-1

Eurofins St. Louis

CASE NARRATIVE

Client: TekLab, Inc

Project: 24100636

Report Number: 160-55941-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition, all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method.

Eurofins Environment Testing attests to the validity of the laboratory data generated by Eurofins facilities reported herein. All analyses performed by Eurofins Environment Testing facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins Environment Testing's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

Calculations are performed before rounding to avoid round-off errors in calculated results.

Proper preservation was noted for the methods performed on these samples, unless otherwise detailed below.

All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client.

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

The matrix for the Method Blank and LCS/LCSD is as close to the samples as can be reasonably achieved. Detailed information can be found in the most current revision of the associated SOP.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

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

Receipt

The samples were received on 10/23/2024 10:38 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved. The temperatures of the 2 coolers at receipt time were 6.5°C and 7.7°C.

Method 903.0 - Radium-226 (GFPC)

Samples 24100636-001 (160-55941-1), 24100636-002 (160-55941-2), 24100636-003 (160-55941-3), 24100636-004 (160-55941-4), 24100636-005 (160-55941-5), 24100636-006 (160-55941-6), 24100636-007 (160-55941-7), 24100636-008 (160-55941-8), 24100636-009 (160-55941-9), 24100636-010 (160-55941-10), 24100636-011 (160-55941-11), 24100636-012 (160-55941-12), 24100636-013 (160-55941-13), 24100636-014 (160-55941-14), 24100636-015 (160-55941-15), 24100636-016 (160-55941-16) and 24100636-017 (160-55941-17) were analyzed for Radium-226 (GFPC). The samples were prepared on 10/24/2024 and analyzed on 11/15/2024.

Method 904.0 - Radium-228 (GFPC)

Samples 24100636-001 (160-55941-1), 24100636-002 (160-55941-2), 24100636-003 (160-55941-3), 24100636-004 (160-55941-4), 24100636-005 (160-55941-5), 24100636-006 (160-55941-6), 24100636-007 (160-55941-7), 24100636-008 (160-55941-8), 24100636-009 (160-55941-9), 24100636-010 (160-55941-10), 24100636-011 (160-55941-11), 24100636-012

Eurofins St. Louis

Client: TekLab, Inc
Project: Radium-226 and Radium-228

Job ID: 160-55941-1

Job ID: 160-55941-1 (Continued)

Eurofins St. Louis

(160-55941-12), 24100636-013 (160-55941-13), 24100636-014 (160-55941-14), 24100636-015 (160-55941-15), 24100636-016 (160-55941-16) and 24100636-017 (160-55941-17) were analyzed for Radium-228 (GFPC). The samples were prepared on 10/24/2024 and analyzed on 11/12/2024.

The detection goal was not met for the following samples due to the reduction of sample size required by the presence of matrix interferences noted in the initial prep (turbidity, yellow discoloration): 24100636-003 (160-55941-3), 24100636-005 (160-55941-5), 24100636-006 (160-55941-6), 24100636-007 (160-55941-7), 24100636-008 (160-55941-8), 24100636-009 (160-55941-9), 24100636-010 (160-55941-10) and 24100636-011 (160-55941-11). Analytical results are reported with the detection limit achieved.

Eurofins St. Louis

Client: TekLab, Inc
Project: Radium-226 and Radium-228

Job ID: 160-55941-1

Job ID: 160-55941-2

Eurofins St. Louis

160-55941-2 Revision 1

Revision

The report has been revised to include the Radium-226/Radium-228 Combined Calculation that was inadvertently omitted in the initial report.

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

Samples 24100636-001 (160-55941-1), 24100636-002 (160-55941-2), 24100636-003 (160-55941-3), 24100636-004 (160-55941-4), 24100636-005 (160-55941-5), 24100636-006 (160-55941-6), 24100636-007 (160-55941-7), 24100636-008 (160-55941-8), 24100636-009 (160-55941-9), 24100636-010 (160-55941-10), 24100636-011 (160-55941-11), 24100636-012 (160-55941-12), 24100636-013 (160-55941-13), 24100636-014 (160-55941-14), 24100636-015 (160-55941-15), 24100636-016 (160-55941-16) and 24100636-017 (160-55941-17) were analyzed for Combined Radium-226 and Radium-228. The samples were analyzed on 11/25/2024.

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

Eurofins St. Louis

TEKLAB, INC. Chain of Custody

5445 Horseshoe Lake Road, Collinsville, IL 62234 Phone (618) 344-1004 Fax (618) 344-1005

Are the samples chilled? YES ☐ NO ☒ With: ☐ Ice ☐ Blue Ice ☐ Preserved in: ☐ Lab ☐ Field

Teklab Inc

5445 Horseshoe Lake Road
Collinsville, IL 62234Cooler Temp: Sampler: QC Level: Comments: **Please issue reports and invoices via email only**

Please analyze for Radium 226/228 per methods specified for Vistra/Ramboll projects.

Method changes require Teklab authorization. Samples collected from an IL site.

Batch QC is required for all analyses requested. Vistra-EDD requested.

Project# 24100636

Contact:

Elizabeth Hurley

Email:

EHurley@TekLabInc.com

Requested Due Date:

Standard TAT

Billing/PO:

37197

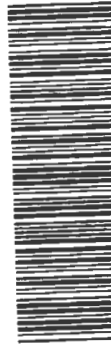
Phone:

(618) 344-1004 ext. 33

PLEASE NOTE:

NELAP accreditation is required on the requested analytes and must be documented as such on the final report. If your laboratory does not currently hold a NELAP accreditation for the requested method and/or analytes, please contact Teklab immediately. If your laboratory loses accreditation or is suspended for any analyte/method during the life of the contract, you must contact Teklab immediately.

Ra226/228 Radium 226 Radium 228



160-55941 Chain of Custody

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix
	24100636-001	10/21/24 1124	HNO3	Groundwater
	24100636-002	10/21/24 1202	HNO3	Groundwater
	24100636-003	10/21/24 1245	HNO3	Groundwater
	24100636-004	10/22/24 0946	HNO3	Groundwater
	24100636-005	10/22/24 1027	HNO3	Groundwater
	24100636-006	10/22/24 1055	HNO3	Groundwater
	24100636-007	10/22/24 0822	HNO3	Groundwater
	24100636-008	10/22/24 1139	HNO3	Groundwater
	24100636-009	10/21/24 1510	HNO3	Groundwater
	24100636-010	10/21/24 1410	HNO3	Groundwater
	24100636-011	10/21/24 1323	HNO3	Groundwater

*Relinquished By: *Emily Dugan* Date/Time: 10-23-24 / 0953
 Received By: *Stephen Smith* Date/Time: 10-23-24 / 1038

Teklab maintains a strict policy of client confidentiality and as such does not provide client/sampler information without proper authorization, and proprietary rights. Teklab, Inc. protects clients' confidential information as directed by local, state or federal laws. (Teklab QAM Section 9.1, TNI V1 M2 Section 4.1.5 c)

SubCocRevA
3/2/2016

TEKLAB, INC. Chain of Custody

5445 Horseshoe Lake Road, Collinsville, IL 62234 Phone (618) 344-1004 Fax (618) 344-1005

Are the samples chilled? YES ☐ NO ☒ With: ☐ Ice ☐ Blue Ice ☐ Preserved in: ☐ Lab ☐ Field

Teklab Inc

5445 Horseshoe Lake Road
Collinsville, IL 62234Cooler Temp: Sampler: Teklab, Inc.QC Level: 2

Comments: **Please issue reports and invoices via email only**
 Please analyze for Radium 226/228 per methods specified for Vistra/Ramboll projects.
 Method changes require Teklab authorization. Samples collected from an IL site.
 Batch QC is required for all analyses requested. Vistra-EDD requested.

Project# 24100636

Contact: Elizabeth Hurley
 Requested Due Date: Standard TAT

Email: EHurley@TekLabInc.com
 Billing/PO: 37197

Phone: (618) 344-1004 ext. 33

PLEASE NOTE:

NELAP accreditation is required on the requested analytes and must be documented as such on the final report. If your laboratory does not currently hold a NELAP accreditation for the requested method and/or analytes, please contact Teklab immediately. If your laboratory loses accreditation or is suspended for any analyte/method during the life of the contract, you must contact Teklab immediately.

Ra226/228 Radium 226 Radium 228

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix
	24100636-012	10/22/24 1215	HNO3	Groundwater
	24100636-013	10/22/24 0908	HNO3	Groundwater
	24100636-014	10/22/24 0925	HNO3	Groundwater
	24100636-015	10/22/24 1310	HNO3	Aqueous
	24100636-016	10/22/24 1215	HNO3	Groundwater
	24100636-017	10/22/24 1315	HNO3	Aqueous
			HNO3	Aqueous
			HNO3	Aqueous
			HNO3	Groundwater
			HNO3	Groundwater
			HNO3	Groundwater

*Relinquished By: Jordan Ouellet Received By: Chun Pan Date/Time: 10/23/24 1038

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Login Sample Receipt Checklist

Client: TekLab, Inc

Job Number: 160-55941-1

SDG Number: 24100636

Login Number: 55941

List Number: 1

Creator: Worthington, Sierra M

List Source: Eurofins St. Louis

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

Definitions/Glossary

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-55941-1
Job Date: 4/1/2024
SDG: 24100636

Qualifiers

Rad

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-55941-1
SDG: 24100636

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

Protocol References:

EPA = US Environmental Protection Agency
None = None
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-55941-1
SDG: 24100636

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-55941-1	24100636-001	Water	10/21/24 11:24	10/23/24 10:38
160-55941-2	24100636-002	Water	10/21/24 12:02	10/23/24 10:38
160-55941-3	24100636-003	Water	10/21/24 12:45	10/23/24 10:38
160-55941-4	24100636-004	Water	10/22/24 09:46	10/23/24 10:38
160-55941-5	24100636-005	Water	10/22/24 10:27	10/23/24 10:38
160-55941-6	24100636-006	Water	10/22/24 10:55	10/23/24 10:38
160-55941-7	24100636-007	Water	10/22/24 08:22	10/23/24 10:38
160-55941-8	24100636-008	Water	10/22/24 11:39	10/23/24 10:38
160-55941-9	24100636-009	Water	10/21/24 15:10	10/23/24 10:38
160-55941-10	24100636-010	Water	10/21/24 14:10	10/23/24 10:38
160-55941-11	24100636-011	Water	10/21/24 13:23	10/23/24 10:38
160-55941-12	24100636-012	Water	10/22/24 12:15	10/23/24 10:38
160-55941-13	24100636-013	Water	10/22/24 09:08	10/23/24 10:38
160-55941-14	24100636-014	Water	10/22/24 09:25	10/23/24 10:38
160-55941-15	24100636-015	Water	10/22/24 13:10	10/23/24 10:38
160-55941-16	24100636-016	Water	10/22/24 12:15	10/23/24 10:38
160-55941-17	24100636-017	Water	10/22/24 13:15	10/23/24 10:38

Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-55941-1
SDG: 24100636

Client Sample ID: 24100636-001

Lab Sample ID: 160-55941-1

Date Collected: 10/21/24 11:24

Matrix: Water

Date Received: 10/23/24 10:38

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.309		0.172	0.174	1.00	0.226	pCi/L	10/24/24 08:10	11/15/24 09:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.8		30 - 110					10/24/24 08:10	11/15/24 09:50	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.174	U	0.396	0.396	1.00	0.784	pCi/L	10/24/24 08:13	11/12/24 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.8		30 - 110					10/24/24 08:13	11/12/24 12:07	1
Y Carrier	76.3		30 - 110					10/24/24 08:13	11/12/24 12:07	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.309	U	0.432	0.433	5.00	0.784	pCi/L		11/25/24 09:04	1

Client Sample ID: 24100636-002

Lab Sample ID: 160-55941-2

Date Collected: 10/21/24 12:02

Matrix: Water

Date Received: 10/23/24 10:38

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.350		0.159	0.162	1.00	0.177	pCi/L	10/24/24 08:10	11/15/24 09:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.5		30 - 110					10/24/24 08:10	11/15/24 09:50	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.809		0.460	0.466	1.00	0.655	pCi/L	10/24/24 08:13	11/12/24 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.5		30 - 110					10/24/24 08:13	11/12/24 12:07	1
Y Carrier	75.5		30 - 110					10/24/24 08:13	11/12/24 12:07	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.16		0.487	0.493	5.00	0.655	pCi/L		11/25/24 09:04	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-55941-1
SDG: 24100636

Client Sample ID: 24100636-003

Lab Sample ID: 160-55941-3

Date Collected: 10/21/24 12:45

Matrix: Water

Date Received: 10/23/24 10:38

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.366	U	0.273	0.275	1.00	0.387	pCi/L	10/24/24 08:10	11/15/24 09:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	46.5		30 - 110					10/24/24 08:10	11/15/24 09:50	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.247	U G	0.694	0.694	1.00	1.40	pCi/L	10/24/24 08:13	11/12/24 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	46.5		30 - 110					10/24/24 08:13	11/12/24 12:07	1
Y Carrier	78.5		30 - 110					10/24/24 08:13	11/12/24 12:07	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.366	U	0.746	0.746	5.00	1.40	pCi/L		11/25/24 09:04	1

Client Sample ID: 24100636-004

Lab Sample ID: 160-55941-4

Date Collected: 10/22/24 09:46

Matrix: Water

Date Received: 10/23/24 10:38

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.337		0.168	0.171	1.00	0.200	pCi/L	10/24/24 08:10	11/15/24 09:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	72.4		30 - 110					10/24/24 08:10	11/15/24 09:50	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.03		0.551	0.559	1.00	0.781	pCi/L	10/24/24 08:13	11/12/24 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	72.4		30 - 110					10/24/24 08:13	11/12/24 12:07	1
Y Carrier	74.4		30 - 110					10/24/24 08:13	11/12/24 12:07	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.37		0.576	0.585	5.00	0.781	pCi/L		11/25/24 09:04	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-55941-1
SDG: 24100636

Client Sample ID: 24100636-005

Lab Sample ID: 160-55941-5

Date Collected: 10/22/24 10:27

Matrix: Water

Date Received: 10/23/24 10:38

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.298	U	0.285	0.286	1.00	0.445	pCi/L	10/24/24 08:10	11/15/24 09:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.8		30 - 110					10/24/24 08:10	11/15/24 09:50	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.778	U G	0.840	0.843	1.00	1.37	pCi/L	10/24/24 08:13	11/12/24 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.8		30 - 110					10/24/24 08:13	11/12/24 12:08	1
Y Carrier	75.9		30 - 110					10/24/24 08:13	11/12/24 12:08	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.08	U	0.887	0.890	5.00	1.37	pCi/L		11/25/24 09:04	1

Client Sample ID: 24100636-006

Lab Sample ID: 160-55941-6

Date Collected: 10/22/24 10:55

Matrix: Water

Date Received: 10/23/24 10:38

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0737	U	0.212	0.212	1.00	0.402	pCi/L	10/24/24 08:10	11/15/24 09:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	67.2		30 - 110					10/24/24 08:10	11/15/24 09:50	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.870	U G	0.934	0.937	1.00	1.51	pCi/L	10/24/24 08:13	11/12/24 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	67.2		30 - 110					10/24/24 08:13	11/12/24 12:08	1
Y Carrier	74.0		30 - 110					10/24/24 08:13	11/12/24 12:08	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.944	U	0.958	0.961	5.00	1.51	pCi/L		11/25/24 09:04	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-55941-1
SDG: 24100636

Client Sample ID: 24100636-007

Lab Sample ID: 160-55941-7

Date Collected: 10/22/24 08:22

Matrix: Water

Date Received: 10/23/24 10:38

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.223	U	0.245	0.245	1.00	0.394	pCi/L	10/24/24 08:10	11/15/24 09:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.2		30 - 110					10/24/24 08:10	11/15/24 09:50	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.95	G	0.823	0.842	1.00	1.05	pCi/L	10/24/24 08:13	11/12/24 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.2		30 - 110					10/24/24 08:13	11/12/24 12:08	1
Y Carrier	79.3		30 - 110					10/24/24 08:13	11/12/24 12:08	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	2.17		0.859	0.877	5.00	1.05	pCi/L		11/25/24 09:04	1

Client Sample ID: 24100636-008

Lab Sample ID: 160-55941-8

Date Collected: 10/22/24 11:39

Matrix: Water

Date Received: 10/23/24 10:38

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.295	U	0.234	0.235	1.00	0.336	pCi/L	10/24/24 08:10	11/15/24 09:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.1		30 - 110					10/24/24 08:10	11/15/24 09:50	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.532	U G	0.628	0.630	1.00	1.32	pCi/L	10/24/24 08:13	11/12/24 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.1		30 - 110					10/24/24 08:13	11/12/24 12:08	1
Y Carrier	81.5		30 - 110					10/24/24 08:13	11/12/24 12:08	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.295	U	0.670	0.672	5.00	1.32	pCi/L		11/25/24 09:04	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-55941-1
SDG: 24100636

Client Sample ID: 24100636-009

Lab Sample ID: 160-55941-9

Date Collected: 10/21/24 15:10

Matrix: Water

Date Received: 10/23/24 10:38

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.25		0.528	0.565	1.00	0.411	pCi/L	10/24/24 08:10	11/15/24 09:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.3		30 - 110					10/24/24 08:10	11/15/24 09:50	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	4.43	G	1.18	1.25	1.00	1.25	pCi/L	10/24/24 08:13	11/12/24 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.3		30 - 110					10/24/24 08:13	11/12/24 12:08	1
Y Carrier	83.7		30 - 110					10/24/24 08:13	11/12/24 12:08	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	6.67		1.29	1.37	5.00	1.25	pCi/L		11/25/24 09:04	1

Client Sample ID: 24100636-010

Lab Sample ID: 160-55941-10

Date Collected: 10/21/24 14:10

Matrix: Water

Date Received: 10/23/24 10:38

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.121	U	0.262	0.262	1.00	0.468	pCi/L	10/24/24 08:10	11/15/24 09:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					10/24/24 08:10	11/15/24 09:50	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0724	U G	0.783	0.783	1.00	1.46	pCi/L	10/24/24 08:13	11/12/24 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					10/24/24 08:13	11/12/24 12:08	1
Y Carrier	79.6		30 - 110					10/24/24 08:13	11/12/24 12:08	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.121	U	0.826	0.826	5.00	1.46	pCi/L		11/25/24 09:04	1

Eurofins St. Louis

Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-55941-1
SDG: 24100636

Client Sample ID: 24100636-011

Lab Sample ID: 160-55941-11

Date Collected: 10/21/24 13:23

Matrix: Water

Date Received: 10/23/24 10:38

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.149	U	0.247	0.248	1.00	0.428	pCi/L	10/24/24 08:10	11/15/24 09:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.4		30 - 110					10/24/24 08:10	11/15/24 09:48	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0578	U G	0.594	0.594	1.00	1.15	pCi/L	10/24/24 08:13	11/12/24 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.4		30 - 110					10/24/24 08:13	11/12/24 12:08	1
Y Carrier	80.4		30 - 110					10/24/24 08:13	11/12/24 12:08	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.149	U	0.643	0.644	5.00	1.15	pCi/L		11/25/24 09:04	1

Client Sample ID: 24100636-012

Lab Sample ID: 160-55941-12

Date Collected: 10/22/24 12:15

Matrix: Water

Date Received: 10/23/24 10:38

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.293		0.159	0.161	1.00	0.204	pCi/L	10/24/24 08:10	11/15/24 09:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.0		30 - 110					10/24/24 08:10	11/15/24 09:48	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.12		0.596	0.605	1.00	0.867	pCi/L	10/24/24 08:13	11/12/24 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.0		30 - 110					10/24/24 08:13	11/12/24 12:08	1
Y Carrier	77.0		30 - 110					10/24/24 08:13	11/12/24 12:08	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.42		0.617	0.626	5.00	0.867	pCi/L		11/25/24 09:04	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-55941-1
SDG: 24100636

Client Sample ID: 24100636-013

Lab Sample ID: 160-55941-13

Date Collected: 10/22/24 09:08

Matrix: Water

Date Received: 10/23/24 10:38

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0797	U	0.120	0.120	1.00	0.205	pCi/L	10/24/24 08:10	11/15/24 09:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					10/24/24 08:10	11/15/24 09:48	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.454	U	0.417	0.419	1.00	0.663	pCi/L	10/24/24 08:13	11/12/24 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					10/24/24 08:13	11/12/24 12:06	1
Y Carrier	77.0		30 - 110					10/24/24 08:13	11/12/24 12:06	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.534	U	0.434	0.436	5.00	0.663	pCi/L		11/25/24 09:04	1

Client Sample ID: 24100636-014

Lab Sample ID: 160-55941-14

Date Collected: 10/22/24 09:25

Matrix: Water

Date Received: 10/23/24 10:38

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.233		0.129	0.130	1.00	0.158	pCi/L	10/24/24 08:10	11/15/24 09:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.3		30 - 110					10/24/24 08:10	11/15/24 09:48	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.215	U	0.373	0.374	1.00	0.639	pCi/L	10/24/24 08:13	11/12/24 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.3		30 - 110					10/24/24 08:13	11/12/24 12:06	1
Y Carrier	79.3		30 - 110					10/24/24 08:13	11/12/24 12:06	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.447	U	0.395	0.396	5.00	0.639	pCi/L		11/25/24 09:04	1

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Client Sample Results

APPENDIX A.
INITIAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-55941-1
SDG: 24100636

Client Sample ID: 24100636-015

Lab Sample ID: 160-55941-15

Date Collected: 10/22/24 13:10

Matrix: Water

Date Received: 10/23/24 10:38

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0442	U	0.0911	0.0912	1.00	0.164	pCi/L	10/24/24 08:10	11/15/24 09:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		30 - 110					10/24/24 08:10	11/15/24 09:48	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0686	U	0.285	0.285	1.00	0.555	pCi/L	10/24/24 08:13	11/12/24 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		30 - 110					10/24/24 08:13	11/12/24 12:06	1
Y Carrier	81.5		30 - 110					10/24/24 08:13	11/12/24 12:06	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.0442	U	0.299	0.299	5.00	0.555	pCi/L		11/25/24 09:04	1

Client Sample ID: 24100636-016

Lab Sample ID: 160-55941-16

Date Collected: 10/22/24 12:15

Matrix: Water

Date Received: 10/23/24 10:38

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.463		0.174	0.179	1.00	0.186	pCi/L	10/24/24 08:10	11/15/24 09:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.6		30 - 110					10/24/24 08:10	11/15/24 09:48	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.537	U	0.396	0.399	1.00	0.602	pCi/L	10/24/24 08:13	11/12/24 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.6		30 - 110					10/24/24 08:13	11/12/24 12:06	1
Y Carrier	76.6		30 - 110					10/24/24 08:13	11/12/24 12:06	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.00		0.433	0.437	5.00	0.602	pCi/L		11/25/24 09:04	1

Eurofins St. Louis

Client Sample Results

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-55941-1
SDG: 24100636

Client Sample ID: 24100636-017

Lab Sample ID: 160-55941-17

Date Collected: 10/22/24 13:15

Matrix: Water

Date Received: 10/23/24 10:38

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0218	U	0.0894	0.0894	1.00	0.172	pCi/L	10/24/24 08:10	11/15/24 09:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.3		30 - 110					10/24/24 08:10	11/15/24 09:48	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.299	U	0.352	0.353	1.00	0.579	pCi/L	10/24/24 08:13	11/12/24 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.3		30 - 110					10/24/24 08:13	11/12/24 12:06	1
Y Carrier	78.5		30 - 110					10/24/24 08:13	11/12/24 12:06	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.321	U	0.363	0.364	5.00	0.579	pCi/L		11/25/24 09:04	1

QC Sample Results

APPENDIX A.

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Job ID: 160-55941-1
SDG: 24100636

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-684904/1-A
Matrix: Water
Analysis Batch: 688682

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 684904

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04502	U	0.0927	0.0927	1.00	0.167	pCi/L	10/24/24 08:10	11/15/24 09:49	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		30 - 110					10/24/24 08:10	11/15/24 09:49	1

Lab Sample ID: LCS 160-684904/2-A
Matrix: Water
Analysis Batch: 688682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 684904

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.58	8.095		0.958	1.00	0.209	pCi/L	85	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	93.4		30 - 110						

Lab Sample ID: 160-55941-2 DU
Matrix: Water
Analysis Batch: 688682

Client Sample ID: 24100636-002
Prep Type: Total/NA
Prep Batch: 684904

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.350		0.3209		0.166	1.00	0.193	pCi/L	0.09	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	73.3		30 - 110							

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-684907/1-A
Matrix: Water
Analysis Batch: 688158

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 684907

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4639	U	0.372	0.375	1.00	0.579	pCi/L	10/24/24 08:13	11/12/24 12:07	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		30 - 110					10/24/24 08:13	11/12/24 12:07	1
Y Carrier	84.1		30 - 110					10/24/24 08:13	11/12/24 12:07	1

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QC Sample Results

APPENDIX A.

ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-55941-1
SDG: 24100636

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-684907/2-A
Matrix: Water
Analysis Batch: 688158

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 684907

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	8.35	8.549		1.21	1.00	0.546	pCi/L	102	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	93.4		30 - 110
Y Carrier	82.2		30 - 110

Lab Sample ID: 160-55941-2 DU
Matrix: Water
Analysis Batch: 688158

Client Sample ID: 24100636-002
Prep Type: Total/NA
Prep Batch: 684907

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.809		0.5279	U	0.454	1.00	0.706	pCi/L	0.31	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	73.3		30 - 110
Y Carrier	78.5		30 - 110

QC Association Summary

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-55941-1
SDG: 24100636

Rad

Prep Batch: 684904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-55941-1	24100636-001	Total/NA	Water	PrecSep-21	
160-55941-2	24100636-002	Total/NA	Water	PrecSep-21	
160-55941-3	24100636-003	Total/NA	Water	PrecSep-21	
160-55941-4	24100636-004	Total/NA	Water	PrecSep-21	
160-55941-5	24100636-005	Total/NA	Water	PrecSep-21	
160-55941-6	24100636-006	Total/NA	Water	PrecSep-21	
160-55941-7	24100636-007	Total/NA	Water	PrecSep-21	
160-55941-8	24100636-008	Total/NA	Water	PrecSep-21	
160-55941-9	24100636-009	Total/NA	Water	PrecSep-21	
160-55941-10	24100636-010	Total/NA	Water	PrecSep-21	
160-55941-11	24100636-011	Total/NA	Water	PrecSep-21	
160-55941-12	24100636-012	Total/NA	Water	PrecSep-21	
160-55941-13	24100636-013	Total/NA	Water	PrecSep-21	
160-55941-14	24100636-014	Total/NA	Water	PrecSep-21	
160-55941-15	24100636-015	Total/NA	Water	PrecSep-21	
160-55941-16	24100636-016	Total/NA	Water	PrecSep-21	
160-55941-17	24100636-017	Total/NA	Water	PrecSep-21	
MB 160-684904/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-684904/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
160-55941-2 DU	24100636-002	Total/NA	Water	PrecSep-21	

Prep Batch: 684907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-55941-1	24100636-001	Total/NA	Water	PrecSep_0	
160-55941-2	24100636-002	Total/NA	Water	PrecSep_0	
160-55941-3	24100636-003	Total/NA	Water	PrecSep_0	
160-55941-4	24100636-004	Total/NA	Water	PrecSep_0	
160-55941-5	24100636-005	Total/NA	Water	PrecSep_0	
160-55941-6	24100636-006	Total/NA	Water	PrecSep_0	
160-55941-7	24100636-007	Total/NA	Water	PrecSep_0	
160-55941-8	24100636-008	Total/NA	Water	PrecSep_0	
160-55941-9	24100636-009	Total/NA	Water	PrecSep_0	
160-55941-10	24100636-010	Total/NA	Water	PrecSep_0	
160-55941-11	24100636-011	Total/NA	Water	PrecSep_0	
160-55941-12	24100636-012	Total/NA	Water	PrecSep_0	
160-55941-13	24100636-013	Total/NA	Water	PrecSep_0	
160-55941-14	24100636-014	Total/NA	Water	PrecSep_0	
160-55941-15	24100636-015	Total/NA	Water	PrecSep_0	
160-55941-16	24100636-016	Total/NA	Water	PrecSep_0	
160-55941-17	24100636-017	Total/NA	Water	PrecSep_0	
MB 160-684907/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-684907/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
160-55941-2 DU	24100636-002	Total/NA	Water	PrecSep_0	

Tracer/Carrier Summary

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-55941-1
SDG: 24100636

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
160-55941-1	24100636-001	75.8	
160-55941-2	24100636-002	77.5	
160-55941-2 DU	24100636-002	73.3	
160-55941-3	24100636-003	46.5	
160-55941-4	24100636-004	72.4	
160-55941-5	24100636-005	86.8	
160-55941-6	24100636-006	67.2	
160-55941-7	24100636-007	90.2	
160-55941-8	24100636-008	84.1	
160-55941-9	24100636-009	77.3	
160-55941-10	24100636-010	87.0	
160-55941-11	24100636-011	82.4	
160-55941-12	24100636-012	79.0	
160-55941-13	24100636-013	87.0	
160-55941-14	24100636-014	86.3	
160-55941-15	24100636-015	91.0	
160-55941-16	24100636-016	84.6	
160-55941-17	24100636-017	88.3	
LCS 160-684904/2-A	Lab Control Sample	93.4	
MB 160-684904/1-A	Method Blank	91.2	

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
160-55941-1	24100636-001	75.8	76.3
160-55941-2	24100636-002	77.5	75.5
160-55941-2 DU	24100636-002	73.3	78.5
160-55941-3	24100636-003	46.5	78.5
160-55941-4	24100636-004	72.4	74.4
160-55941-5	24100636-005	86.8	75.9
160-55941-6	24100636-006	67.2	74.0
160-55941-7	24100636-007	90.2	79.3
160-55941-8	24100636-008	84.1	81.5
160-55941-9	24100636-009	77.3	83.7
160-55941-10	24100636-010	87.0	79.6
160-55941-11	24100636-011	82.4	80.4
160-55941-12	24100636-012	79.0	77.0
160-55941-13	24100636-013	87.0	77.0
160-55941-14	24100636-014	86.3	79.3
160-55941-15	24100636-015	91.0	81.5
160-55941-16	24100636-016	84.6	76.6
160-55941-17	24100636-017	88.3	78.5
LCS 160-684907/2-A	Lab Control Sample	93.4	82.2
MB 160-684907/1-A	Method Blank	91.2	84.1

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Tracer/Carrier Summary

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND

Client: TekLab, Inc
Project/Site: Radium-226 and Radium-228

Job ID: 160-55941-1
SDG: 24100636

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

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APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
Field Data Sheet
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Project Name: JOP-24Q4
Project Location: Joppa, Illinois
W.O. Number (s): 24100635

Monitoring Point: G01D
Sample ID: 001
Date (s): 10/21/2024

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 64 °F Wind Direction: ☐ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☒ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No
Casing	Good	Protective Casing		X
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 10/21/2024 10:59 Static Water Level: 44.65 feet below TOC
Total Depth: 67.10 feet below TOC
Water Column: 22.45 feet

Purging Activities

Purged By: JC Purge Date: 10/21/2024
Purge Method: Bladder Pump Well Diameter: 2"
Purge Volume Calculation (L): $22.45 \text{ ft.} \times 22.45 = 0.49 \text{ L} \times 3 \text{ Vol.} = 1.47 \text{ L}$ *Based on Low-Flow (3/8" discharge)
Actual Purge Volume (L): 5.00 L
Physical appearance of purge water: Clear Odor: None Color: none

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
10:59	0.0	200	purge start time						
11:12	2.6	↓	6.24	785.70	16.81	3.25	111.00	6.96	
11:15	3.2		6.27	773.90	17.42	1.84	108.30	8.68	
11:18	3.8		6.30	773.70	17.88	1.54	105.10	11.95	
11:21	4.4		6.31	775.10	18.22	1.41	103.00	15.63	
11:24	5.0		6.32	776.40	18.54	1.35	101.50	18.77	

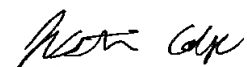
Sampling Activities

Sampled By: JC Sample Date/Time: 10/21/2024 11:24
Sample Method: Low Flow Sample Equipment: Bladder Pump
Sample Parameters: 6.32 pH 776.40 Spec. Cond. 18.54 Temp
Field Filtered: No Filter Type:
Water Level: 44.98 feet below TOC Drawdown: 0.33 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 43918

Form Completed By:




Date: 10/21/2024

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Field Data Sheet

Project Name: JOP-24Q4
Project Location: Joppa, Illinois
W.O. Number (s): 24100635

Monitoring Point: G02D
Sample ID: 002
Date (s): 10/21/2024

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 68 °F Wind Direction: ☐ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☒ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No
Casing	Good	Protective Casing	X	
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 10/21/2024 11:40 Static Water Level: 44.89 feet below TOC
Total Depth: 75.20 feet below TOC
Water Column: 30.31 feet

Purging Activities

Purged By: JC Purge Date: 10/21/2024
Purge Method: Bladder Pump Well Diameter: 2"
Purge Volume Calculation (L): $30.31 \text{ ft.} \times 30.31 = 0.67 \text{ L} \times 3 \text{ Vol.} = 2.01 \text{ L}$ *Based on Low-Flow (3/8" discharge)
Actual Purge Volume (L): 3.00 L
Physical appearance of purge water: Clear Odor: None Color: none

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
11:41	0.0	143	purge start time						
11:53	1.7	↓	6.40	606.90	15.02	3.59	114.20	1.95	
11:56	2.1		6.29	609.40	14.90	2.89	117.30	3.77	
11:59	2.6		6.25	610.10	14.84	2.82	119.20	3.37	
12:02	3.0		6.24	609.40	14.81	2.76	120.40	3.03	

Sampling Activities

Sampled By: JC Sample Date/Time: 10/21/2024 12:02
Sample Method: Low Flow Sample Equipment: Bladder Pump
Sample Parameters: 6.24 pH 609.40 Spec. Cond. 14.81 Temp
Field Filtered: No Filter Type:
Water Level: 44.91 feet below TOC Drawdown: 0.02 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 43918

Form Completed By:

[Signature]

Date: 10/21/2024



APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND
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Field Data Sheet

Project Name: JOP-24Q4 Monitoring Point: G03
Project Location: Joppa, Illinois Sample ID: 003
W.O. Number (s): 24100635 Date (s): 10/21/2024

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 71 °F Wind Direction: ☐ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☒ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No
Casing	Good	Protective Casing	X	
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 10/21/2024 12:22 Static Water Level: 39.89 feet below TOC
Total Depth: 68.03 feet below TOC
Water Column: 28.14 feet

Purging Activities

Purged By: JC Purge Date: 10/21/2024
Purge Method: Bladder Pump Well Diameter: 2"
Purge Volume Calculation (L): $28.14 \text{ ft.} \times 28.14 = 0.62 \text{ L} \times 3 \text{ Vol.} = 1.86 \text{ L}$ *Based on Low-Flow (3/8" discharge)
Actual Purge Volume (L): 4.00 L
Physical appearance of purge water: Slightly cloudy Odor: None Color: lt yellow

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (μS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
12:23	0.0	182	purge start time						
12:30	1.3	↓	6.05	848.70	17.02	3.31	129.00	29.43	
12:33	1.8		6.04	887.60	17.01	2.78	129.70	12.83	
12:36	2.4		6.04	891.20	17.01	2.51	129.60	14.51	
12:39	2.9		6.04	900.30	17.03	2.32	129.50	16.75	
12:42	3.5		6.04	903.80	16.97	2.22	129.30	25.78	
12:45	4.0		6.04	896.50	17.01	2.17	129.30	33.76	

Sampling Activities

Sampled By: JC Sample Date/Time: 10/21/2024 12:45
Sample Method: Low Flow Sample Equipment: Bladder Pump
Sample Parameters: 6.04 pH 896.50 Spec. Cond. 17.01 Temp
Field Filtered: No Filter Type:
Water Level: 39.90 feet below TOC Drawdown: 0.01 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 43918

Form Completed By:

Justin Colp

Date: 10/21/2024



APPENDIX A.
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JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Field Data Sheet

Project Name: JOP-24Q4
Project Location: Joppa, Illinois
W.O. Number (s): 24100635

Monitoring Point: G05
Sample ID: 004
Date (s): 10/22/2024

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 55 °F Wind Direction: ☒ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No
Casing	Good	Protective Casing	X	
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 10/22/2024 9:21 Static Water Level: 45.56 feet below TOC
Total Depth: 62.92 feet below TOC
Water Column: 17.36 feet

Purging Activities

Purged By: JC Purge Date: 10/22/2024
Purge Method: Bladder Pump Well Diameter: 2"
Purge Volume Calculation (L): $17.36 \text{ ft.} \times 17.36 = 0.38 \text{ L} \times 3 \text{ Vol.} = 1.14 \text{ L}$ *Based on Low-Flow (3/8" discharge)
Actual Purge Volume (L): 4.00 L
Physical appearance of purge water: Clear Odor: None Color: none

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
9:22	0.0	167	purge start time						
9:31	1.5	↓	6.26	904.90	16.66	1.93	70.30	19.88	
9:34	2.0		6.26	909.40	16.78	1.54	70.70	11.52	
9:37	2.5		6.26	909.70	16.83	1.24	71.60	10.49	
9:40	3.0		6.26	907.50	16.89	1.07	72.80	9.60	
9:43	3.5		6.25	899.90	16.96	1.00	73.90	10.46	
9:46	4.0		6.25	894.30	17.09	0.98	73.30	12.31	

Sampling Activities

Sampled By: JC Sample Date/Time: 10/22/2024 9:46
Sample Method: Low Flow Sample Equipment: Bladder Pump
Sample Parameters: 6.25 pH 894.30 Spec. Cond. 17.09 Temp
Field Filtered: No Filter Type:
Water Level: 45.56 feet below TOC Drawdown: 0.00 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 43918

Form Completed By:

Justin Colp

Date: 10/22/2024



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JOPPA POWER PLANT, EAST ASH POND
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Field Data Sheet

Project Name: JOP-24Q4 Monitoring Point: G06
Project Location: Joppa, Illinois Sample ID: 005
W.O. Number (s): 24100635 Date (s): 10/22/2024

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 60 °F Wind Direction: ☒ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

	Well Pad	Good		Locks	Yes	No
Casing	Good		Protective Casing	X		
Protective Casing	Good		Well			X
Reference Mark/Identification	Yes					

Groundwater Level Measurements

Date/Time Measured: 10/22/2024 9:57 Static Water Level: 41.91 feet below TOC
Total Depth: 62.76 feet below TOC
Water Column: 20.85 feet

Purging Activities

Purged By: JC Purge Date: 10/22/2024
Purge Method: Bladder Pump Well Diameter: 2"
Purge Volume Calculation (L): 20.85 ft. x 20.85 = 0.46 L x 3 Vol. = 1.38 L **Based on Low-Flow (3/8" discharge)*
Actual Purge Volume (L): 6.00 L
Physical appearance of purge water: Slightly cloudy Odor: None Color: It yellow

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
10:00	0.0	222	purge start time						
10:06	1.3	↓	6.41	1,062.70	15.48	3.95	107.50	57.80	
10:09	2.0		6.43	1,063.50	15.35	2.82	107.20	69.38	
10:12	2.7		6.42	1,048.70	15.30	2.24	107.20	84.10	
10:15	3.3		6.41	1,036.20	15.30	1.80	107.20	89.21	
10:18	4.0		6.41	1,030.10	15.36	1.46	107.10	91.75	
10:21	4.7		6.40	1,026.00	15.35	1.27	107.10	73.08	
10:24	5.3		6.40	1,022.20	15.42	1.16	107.00	70.45	
10:27	6.0		6.40	1,022.40	15.51	1.06	106.90	60.13	

Sampling Activities

Sampled By: JC Sample Date/Time: 10/22/2024 10:27
Sample Method: Low Flow Sample Equipment: Bladder Pump
Sample Parameters: 6.40 pH 1,022.40 Spec. Cond. 15.51 Temp
Field Filtered: No Filter Type:
Water Level: 42.05 feet below TOC Drawdown: 0.14 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 43918

Form Completed By:

Justin Colp

Date: 10/22/2024



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Field Data Sheet
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Project Name: JOP-24Q4
Project Location: Joppa, Illinois
W.O. Number (s): 24100635

Monitoring Point: G07
Sample ID: 006
Date (s): 10/22/2024

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 66 °F Wind Direction: ☒ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No
Casing	Good	Protective Casing	X	
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 10/22/2024 10:36 Static Water Level: 41.93 feet below TOC
Total Depth: 87.64 feet below TOC
Water Column: 45.71 feet

Purging Activities

Purged By: JC Purge Date: 10/22/2024
Purge Method: Bladder Pump Well Diameter: 2"
Purge Volume Calculation (L): $45.71 \text{ ft.} \times 45.71 = 1.01 \text{ L} \times 3 \text{ Vol.} = 3.03 \text{ L}$ *Based on Low-Flow (3/8" discharge)
Actual Purge Volume (L): 3.00 L
Physical appearance of purge water: Slightly cloudy Odor: None Color: lt yellow

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
10:37	0.0	167	purge start time						
10:43	1.0	↓	6.17	1,179.30	15.45	1.83	121.20	155.44	
10:46	1.5		6.16	1,181.80	15.68	1.24	121.60	198.01	
10:49	2.0		6.15	1,178.20	15.72	1.04	122.20	177.78	
10:52	2.5		6.15	1,176.70	15.73	0.93	122.60	149.01	
10:55	3.0		6.15	1,182.40	15.71	0.86	123.10	124.70	

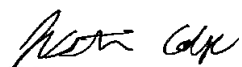
Sampling Activities

Sampled By: JC Sample Date/Time: 10/22/2024 10:55
Sample Method: Low Flow Sample Equipment: Bladder Pump
Sample Parameters: 6.15 pH 1,182.40 Spec. Cond. 15.71 Temp
Field Filtered: No Filter Type:
Water Level: 41.93 feet below TOC Drawdown: 0.00 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 43918

Form Completed By:




Date: 10/22/2024

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Field Data Sheet

Project Name: JOP-24Q4 Monitoring Point: G08
Project Location: Joppa, Illinois Sample ID: 007
W.O. Number (s): 24100635 Date (s): 10/22/2024

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 50 °F Wind Direction: ☒ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No
Casing	Good	Protective Casing	X	
Protective Casing	Good			
Reference Mark/Identification	Yes	Well		X

Groundwater Level Measurements

Date/Time Measured: 10/22/2024 7:57 Static Water Level: 33.02 feet below TOC
Total Depth: 86.82 feet below TOC
Water Column: 53.80 feet

Purging Activities

Purged By: JC Purge Date: 10/22/2024
Purge Method: Bladder Pump Well Diameter: 2"
Purge Volume Calculation (L): $53.8 \text{ ft.} \times 53.8 = 1.18 \text{ L} \times 3 \text{ Vol.} = 3.54 \text{ L}$ *Based on Low-Flow (3/8" discharge)
Actual Purge Volume (L): 4.00 L
Physical appearance of purge water: Slightly cloudy Odor: None Color: orange

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (μS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
7:58	0.0	167	purge start time						
8:07	1.5	↓	6.65	1,423.50	14.95	2.28	-31.80	66.59	
8:10	2.0		6.72	1,406.60	14.96	1.79	-49.90	130.92	
8:13	2.5		6.76	1,382.00	14.97	1.51	-56.60	151.21	
8:16	3.0		6.79	1,361.60	14.96	1.27	-61.50	150.84	
8:19	3.5		6.81	1,345.80	14.97	1.11	-64.80	144.52	
8:22	4.0		6.82	1,333.00	14.98	1.01	-66.70	128.93	

Sampling Activities

Sampled By: JC Sample Date/Time: 10/22/2024 8:22
Sample Method: Low Flow Sample Equipment: Bladder Pump
Sample Parameters: 6.82 pH 1,333.00 Spec. Cond. 14.98 Temp
Field Filtered: No Filter Type:
Water Level: 33.43 feet below TOC Drawdown: 0.41 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 43918

Form Completed By:

Justin Colp

Date: 10/22/2024



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JOPPA POWER PLANT, EAST ASH POND
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Field Data Sheet

Project Name: JOP-24Q4 Monitoring Point: G09
 Project Location: Joppa, Illinois Sample ID: 008
 W.O. Number (s): 24100635 Date (s): 10/22/2024

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
 Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 68 °F Wind Direction: ☒ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW
 Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No
Casing	Good	Protective Casing	X	
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 10/22/2024 11:11 Static Water Level: 41.79 feet below TOC
 Total Depth: 72.51 feet below TOC
 Water Column: 30.72 feet

Purging Activities

Purged By: JC Purge Date: 10/22/2024
 Purge Method: Bladder Pump Well Diameter: 2"
 Purge Volume Calculation (L): 30.72 ft. x 30.72 = 0.68 L x 3 Vol. = 2.04 L **Based on Low-Flow (3/8" discharge)*
 Actual Purge Volume (L): 4.00 L
 Physical appearance of purge water: Clear Odor: None Color: none

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
11:12	0.0	148	purge start time						
11:21	1.3	↓	6.06	999.00	18.24	2.61	8.50	43.28	
11:24	1.8		5.97	1,008.50	18.20	1.82	14.70	30.79	
11:27	2.2		5.95	1,011.00	18.18	1.47	15.90	26.80	
11:30	2.7		5.93	1,010.40	18.21	1.24	15.10	27.94	
11:33	3.1		5.92	1,010.50	18.23	1.07	14.50	27.71	
11:36	3.6		5.91	1,010.70	18.25	0.92	14.10	26.93	
11:39	4.0		5.91	1,010.90	18.29	0.84	13.60	25.59	

Sampling Activities

Sampled By: JC Sample Date/Time: 10/22/2024 11:39
 Sample Method: Low Flow Sample Equipment: Bladder Pump
 Sample Parameters: 5.91 pH 1,010.90 Spec. Cond. 18.29 Temp
 Field Filtered: No Filter Type: _____
 Water Level: 41.79 feet below TOC Drawdown: 0.00 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 43918

Form Completed By: Justin Colp

Date: 10/22/2024



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ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
Field Data Sheet
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Project Name: JOP-24Q4 **Monitoring Point:** G10
Project Location: Joppa, Illinois **Sample ID:** 009
W.O. Number (s): 24100635 **Date (s):** 10/21/2024

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 76 °F Wind Direction: ☐ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☒ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No	
Casing	Good		Protective Casing	X	
Protective Casing	Good		Well		X
Reference Mark/Identification	Yes				

Groundwater Level Measurements

Date/Time Measured: 10/21/2024 14:25 Static Water Level: 42.12 feet below TOC
Total Depth: 73.04 feet below TOC
Water Column: 30.92 feet

Purging Activities

Purged By: JC Purge Date: 10/21/2024
Purge Method: Bladder Pump Well Diameter: 2"
Purge Volume Calculation (L): $30.92 \text{ ft.} \times 30.92 = 0.68 \text{ L} \times 3 \text{ Vol.} = 2.04 \text{ L}$ *Based on Low-Flow (3/8" discharge)
Actual Purge Volume (L): 10.00 L
Physical appearance of purge water: Cloudy Odor: Slight Color: orange/red

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (μS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
14:26	0.0	227	purge start time						
14:36	2.3	↓	6.19	1,595.60	17.82	1.43	48.20	10090.73	
14:39	3.0		6.20	1,589.90	17.78	1.22	46.70	6495.46	
14:42	3.6		6.20	1,591.00	17.72	1.01	45.50	8768.46	
14:45	4.3		6.20	1,585.80	17.72	0.90	45.80	830.56	
14:48	5.0		6.20	1,583.70	17.70	0.80	45.20	1369.57	
14:51	5.7		6.20	1,578.90	17.82	0.75	45.10	924.64	
14:54	6.4		6.20	1,576.10	17.76	0.71	45.40	5166.87	
14:57	7.0		6.89	19.10	18.04	6.99	59.30	28.75	
15:01	8.0		6.22	1,575.00	17.57	1.71	49.20	200.03	
15:04	8.6		6.21	1,572.90	17.70	1.31	48.50	178.73	
15:07	9.3		6.21	1,570.10	17.67	1.15	48.00	368.26	
15:10	10.0		6.21	1,568.40	17.68	1.12	48.80	381.64	

Sampling Activities

Sampled By: JC Sample Date/Time: 10/21/2024 15:10
Sample Method: Low Flow Sample Equipment: Bladder Pump
Sample Parameters: 6.21 pH 1,568.40 Spec. Cond. 17.68 Temp
Field Filtered: No Filter Type:
Water Level: 42.28 feet below TOC Drawdown: 0.16 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 43918
- Tubing disconnected during purge at 14:57

Form Completed By:  Date: 10/21/2024



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ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
Field Data Sheet
 JOPPA POWER PLANT, EAST ASH POND
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Project Name: JOP-24Q4
 Project Location: Joppa, Illinois
 W.O. Number (s): 24100635

Monitoring Point: G11
 Sample ID: 010
 Date (s): 10/21/2024

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
 Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 75 °F Wind Direction: ☐ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☒ NW
 Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No
Casing	Good	Protective Casing	X	
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 10/21/2024 13:36 Static Water Level: 49.16 feet below TOC
 Total Depth: 68.90 feet below TOC
 Water Column: 19.74 feet

Purging Activities

Purged By: JC Purge Date: 10/21/2024
 Purge Method: Bladder Pump Well Diameter: 2"
 Purge Volume Calculation (L): 19.74 ft. x 19.74 = 0.43 L x 3 Vol. = 1.29 L **Based on Low-Flow (3/8" discharge)*
 Actual Purge Volume (L): 6.00 L
 Physical appearance of purge water: Clear Odor: None Color: none

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
13:36	0.0	176	purge start time						
13:43	1.2	↓	5.74	1,109.00	18.45	4.58	162.60	10.83	
13:46	1.8		5.73	1,136.10	18.26	3.84	162.90	14.51	
13:49	2.3		5.73	1,153.30	18.30	3.37	162.90	19.44	
13:52	2.8		5.73	1,155.10	18.32	3.06	162.80	26.35	
13:55	3.4		5.73	1,152.50	18.23	2.84	162.70	32.94	
13:58	3.9		5.73	1,144.30	18.21	2.67	162.30	40.11	
14:01	4.4		5.73	1,131.80	18.29	2.51	162.10	43.99	
14:04	4.9		5.73	1,119.70	18.22	2.39	162.00	49.37	
14:07	5.5		5.73	1,103.80	18.22	2.29	161.80	57.65	
14:10	6.0		5.74	1,091.30	18.25	2.22	161.50	64.11	

Sampling Activities

Sampled By: JC Sample Date/Time: 10/21/2024 14:10
 Sample Method: Low Flow Sample Equipment: Bladder Pump
 Sample Parameters: 5.74 pH 1,091.30 Spec. Cond. 18.25 Temp
 Field Filtered: No Filter Type:
 Water Level: 49.16 feet below TOC Drawdown: 0.00 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 43918

Form Completed By: Justin Colp

Date: 10/21/2024



APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
Field Data Sheet
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Project Name: JOP-24Q4
Project Location: Joppa, Illinois
W.O. Number (s): 24100635

Monitoring Point: G51D
Sample ID: 011
Date (s): 10/21/2024

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 73 °F Wind Direction: ☐ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☒ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No
Casing	Good	Protective Casing	X	
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 10/21/2024 12:58 Static Water Level: 45.88 feet below TOC
Total Depth: 62.70 feet below TOC
Water Column: 16.82 feet

Purging Activities

Purged By: JC Purge Date: 10/21/2024
Purge Method: Bladder Pump Well Diameter: 2"
Purge Volume Calculation (L): $16.82 \text{ ft.} \times 16.82 = 0.37 \text{ L} \times 3 \text{ Vol.} = 1.11 \text{ L}$ *Based on Low-Flow (3/8" discharge)
Actual Purge Volume (L): 5.00 L
Physical appearance of purge water: Clear Odor: None Color: none

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
12:58	0.0	200	purge start time						
13:11	2.6	↓	5.23	602.30	18.22	2.83	155.60	57.92	
13:14	3.2		5.22	599.20	18.19	2.37	159.70	60.43	
13:17	3.8		5.21	597.30	18.18	2.16	163.10	66.82	
13:20	4.4		5.20	596.00	18.15	2.02	166.00	68.10	
13:23	5.0		5.20	595.40	18.16	1.90	168.50	63.74	

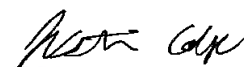
Sampling Activities

Sampled By: JC Sample Date/Time: 10/21/2024 13:23
Sample Method: Low Flow Sample Equipment: Bladder Pump
Sample Parameters: 5.20 pH 595.40 Spec. Cond. 18.16 Temp
Field Filtered: No Filter Type:
Water Level: 46.00 feet below TOC Drawdown: 0.12 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 43918

Form Completed By:




Date: 10/21/2024

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Field Data Sheet

Project Name: JOP-24Q4
Project Location: Joppa, Illinois
W.O. Number (s): 24100635

Monitoring Point: G52D
Sample ID: 012
Date (s): 10/22/2024

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 73 °F Wind Direction: ☒ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No	
Casing	Good		Protective Casing	X	
Protective Casing	Good		Well		X
Reference Mark/Identification	Yes				

Groundwater Level Measurements

Date/Time Measured: 10/22/2024 11:54 Static Water Level: 29.90 feet below TOC
Total Depth: 82.50 feet below TOC
Water Column: 52.60 feet

Purging Activities

Purged By: JC Purge Date: 10/22/2024
Purge Method: Bladder Pump Well Diameter: 2"
Purge Volume Calculation (L): $52.6 \text{ ft.} \times 52.6 = 1.16 \text{ L} \times 3 \text{ Vol.} = 3.48 \text{ L}$ *Based on Low-Flow (3/8" discharge)
Actual Purge Volume (L): 5.00 L
Physical appearance of purge water: Clear Odor: Slight Color: none

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
11:55	0.0	250	purge start time						
12:00	1.3	↓	6.17	649.40	15.80	2.64	-46.80	9.51	
12:03	2.0		6.19	649.70	15.75	1.74	-55.40	10.42	
12:06	2.8		6.20	649.80	15.77	1.40	-60.80	10.25	
12:09	3.5		6.20	648.90	15.72	1.17	-64.20	7.64	
12:12	4.3		6.21	648.70	15.73	1.12	-67.00	7.15	
12:15	5.0		6.21	649.10	15.79	1.04	-69.50	5.55	

Sampling Activities

Sampled By: JC Sample Date/Time: 10/22/2024 12:15
Sample Method: Low Flow Sample Equipment: Bladder Pump
Sample Parameters: 6.21 pH 649.10 Spec. Cond. 15.79 Temp
Field Filtered: No Filter Type:
Water Level: 29.99 feet below TOC Drawdown: 0.09 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 43918

Form Completed By:

Justin Colp

Date: 10/22/2024



APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Field Data Sheet

Project Name: JOP-24Q4 Monitoring Point: G53D
Project Location: Joppa, Illinois Sample ID: 013
W.O. Number (s): 24100635 Date (s): 10/22/2024

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 51 °F Wind Direction: ☒ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No
Casing	Good	Protective Casing	X	
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 10/22/2024 8:38 Static Water Level: 39.64 feet below TOC
Total Depth: 60.60 feet below TOC
Water Column: 20.96 feet

Purging Activities

Purged By: JC Purge Date: 10/22/2024
Purge Method: Bladder Pump Well Diameter: 2"
Purge Volume Calculation (L): 20.96 ft. x 20.96 = 0.46 L x 3 Vol. = 1.38 L **Based on Low-Flow (3/8" discharge)*
Actual Purge Volume (L): 5.00 L
Physical appearance of purge water: Clear Odor: None Color: none

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
8:39	0.0	172	purge start time						
8:47	1.4	↓	6.22	738.80	15.78	2.79	38.60	5.30	
8:50	1.9		6.20	739.10	15.81	2.31	46.30	5.25	
8:53	2.4		6.18	738.00	15.91	2.16	51.50	5.53	
8:56	2.9		6.18	735.90	15.98	1.94	54.20	5.86	
8:59	3.4		6.17	734.20	16.06	1.72	56.50	4.97	
9:02	4.0		6.17	732.60	16.11	1.55	58.50	4.85	
9:05	4.5		6.17	730.80	16.15	1.51	59.90	4.41	
9:08	5.0		6.17	729.60	16.20	1.45	60.60	3.93	

Sampling Activities

Sampled By: JC Sample Date/Time: 10/22/2024 9:08
Sample Method: Low Flow Sample Equipment: Bladder Pump
Sample Parameters: 6.17 pH 729.60 Spec. Cond. 16.20 Temp
Field Filtered: No Filter Type:
Water Level: 39.79 feet below TOC Drawdown: 0.15 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 43918

Form Completed By:

Justin Colp

Date: 10/22/2024



APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
Field Data Sheet
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Project Name: JOP-24Q4
Project Location: Joppa, Illinois
W.O. Number (s): 24100635
Monitoring Point: G54D
Sample ID: 014
Date (s): 10/22/2024

Field Team Members

Name: Brett Gillihan
Affiliation: TekLab, Inc.

Weather Conditions

Temp: 55 °F
Wind Direction: ☒ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW
Precipitation: ☒ None ☐ Light ☐ Heavy
Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No
Casing	Good	Protective Casing	X	
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 10/22/2024 8:41
Static Water Level: 44.17 feet below TOC
Total Depth: 83.50 feet below TOC
Water Column: 39.33 feet

Purging Activities

Purged By: BG
Purge Method: Bladder Pump
Purge Volume Calculation (L): $39.33 \text{ ft.} \times 39.33 = 0.87 \text{ L} \times 3 \text{ Vol.} = 2.61 \text{ L}$
Actual Purge Volume (L): 6.00 L
Physical appearance of purge water: Clear
Purge Date: 10/22/2024
Well Diameter: 2"
**Based on Low-Flow (3/8" discharge)*
Odor: None
Color: Clear

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
8:41	0.0	136	purge start time						
9:16	4.8	↓	6.76	740.40	16.15	1.00	16.80	434.90	
9:19	5.2		6.76	740.70	16.19	0.49	17.00	8.97	
9:22	5.6		6.77	740.00	16.23	0.41	17.40	7.71	
9:25	6.0		6.76	738.30	16.26	0.39	18.00	5.56	

Sampling Activities

Sampled By: BG
Sample Method: Low Flow
Sample Parameters: 6.76 pH 738.30 Spec. Cond. 16.26 Temp
Field Filtered: No Filter Type:
Water Level: 45.23 feet below TOC
Sample Date/Time: 10/22/2024 9:25
Sample Equipment: Bladder Pump
Drawdown: 1.06 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 223357

Form Completed By:

Brett Gillihan

Date: 10/22/2024



APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
Field Data Sheet
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Project Name: JOP-24Q4
Project Location: Joppa, Illinois
W.O. Number (s): 24100635

Monitoring Point: XPW01
Sample ID: 015
Date (s): 10/22/2024

Field Team Members

Name: Brett Gillihan Affiliation: TekLab, Inc.
Name: Affiliation:

Weather Conditions

Temp: 69 °F Wind Direction: ☒ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No
Casing	Good	Protective Casing	X	
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 10/22/2024 11:21 Static Water Level: 15.94 feet below TOC
Total Depth: 56.31 feet below TOC
Water Column: 40.37 feet

Purging Activities

Purged By: BG Purge Date: 10/22/2024
Purge Method: Bladder Pump Well Diameter: 2"
Purge Volume Calculation (L): $40.37 \text{ ft.} \times 40.37 = 0.89 \text{ L} \times 3 \text{ Vol.} = 2.67 \text{ L}$ *Based on Low-Flow (3/8" discharge)
Actual Purge Volume (L): 3.50 L
Physical appearance of purge water: Clear Odor: None Color: Clear

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
11:21	0.0	350	purge start time						
11:25	1.4	↓	7.46	953.70	18.63	4.22	-31.00	4.32	
11:28	2.4		8.06	905.40	19.09	2.01	-84.00	5.96	
11:31	3.5		7.99	910.40	19.93	1.96	-72.30	5.76	

Sampling Activities

Sampled By: BG Sample Date/Time: 10/22/2024 11:31
Sample Method: Low Flow Sample Equipment: Bladder Pump
Sample Parameters: 7.99 pH 910.40 Spec. Cond. 19.93 Temp
Field Filtered: No Filter Type:
Water Level: 16.08 feet below TOC Drawdown: 0.14 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 223357
-

Form Completed By:

Brett Gillihan

Date: 10/22/2024



APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
Field Data Sheet
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Project Name: JOP-24Q4
Project Location: Joppa, Illinois
W.O. Number (s): 24100635

Monitoring Point: XPW02
Sample ID: 016
Date (s): 10/22/2024

Field Team Members

Name: Brett Gillihan Affiliation: TekLab, Inc.
Name: Affiliation:

Weather Conditions

Temp: 68 °F Wind Direction: ☒ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No
Casing	Good	Protective Casing	X	
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 10/22/2024 11:00 Static Water Level: 5.59 feet below TOC
Total Depth: 32.52 feet below TOC
Water Column: 26.93 feet

Purging Activities

Purged By: BG Purge Date: 10/22/2024
Purge Method: Bladder Pump Well Diameter: 2"
Purge Volume Calculation (L): $26.93 \text{ ft.} \times 26.93 = 0.59 \text{ L} \times 3 \text{ Vol.} = 1.77 \text{ L}$ *Based on Low-Flow (3/8" discharge)
Actual Purge Volume (L): 3.00 L
Physical appearance of purge water: Slightly cloudy Odor: Slight Color: Clear

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
11:00	0.0	187	purge start time						
11:04	0.7	↓	7.33	4,318.10	18.37	3.83	-9.40	11.01	
11:07	1.3		7.84	4,364.90	18.12	1.00	-134.50	6.42	
11:10	1.9		7.92	4,376.80	18.05	0.60	-156.30	15.55	
11:13	2.4		7.92	4,381.40	18.18	0.47	-160.20	44.35	
11:16	3.0		7.92	4,383.90	18.35	0.43	-161.60	81.81	

Sampling Activities

Sampled By: BG Sample Date/Time: 10/22/2024 11:16
Sample Method: Low Flow Sample Equipment: Bladder Pump
Sample Parameters: 7.92 pH 4,383.90 Spec. Cond. 18.35 Temp
Field Filtered: No Filter Type:
Water Level: 5.86 feet below TOC Drawdown: 0.27 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 223357

Form Completed By:

Brett Gillihan
TekLab Inc.
Environmental Laboratory

Date: 10/22/2024



APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
Field Data Sheet
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Project Name: JOP-24Q4
Project Location: Joppa, Illinois
W.O. Number (s): 24100635

Monitoring Point: XPW03
Sample ID: 017
Date (s): 10/22/2024

Field Team Members

Name: Brett Gillihan Affiliation: TekLab, Inc.
Name: Affiliation:

Weather Conditions

Temp: 75 °F Wind Direction: ☒ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No
Casing	Good	Protective Casing	X	
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 10/22/2024 11:46 Static Water Level: 14.69 feet below TOC
Total Depth: 39.57 feet below TOC
Water Column: 24.88 feet

Purging Activities

Purged By: BG Purge Date: 10/22/2024
Purge Method: Bladder Pump Well Diameter: 2"
Purge Volume Calculation (L): $24.88 \text{ ft.} \times 24.88 = 0.55 \text{ L} \times 3 \text{ Vol.} = 1.65 \text{ L}$ *Based on Low-Flow (3/8" discharge)
Actual Purge Volume (L): 3.50 L
Physical appearance of purge water: Clear Odor: None Color: Clear

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (μS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
11:46	0.0	438	purge start time						
11:48	0.9	↓	11.34	608.70	18.87	1.58	-81.80	7.10	
11:51	2.2		11.30	608.30	19.72	1.16	-90.00	5.10	
11:54	3.5		11.33	620.20	19.09	0.94	-94.10	6.02	

Sampling Activities

Sampled By: BG Sample Date/Time: 10/22/2024 11:54
Sample Method: Low Flow Sample Equipment: Bladder Pump
Sample Parameters: 11.33 pH 620.20 Spec. Cond. 19.09 Temp
Field Filtered: No Filter Type:
Water Level: 14.77 feet below TOC Drawdown: 0.08 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 223357

Form Completed By:

Brett Gillihan

Date: 10/22/2024



APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
Field Data Sheet
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Project Name: JOP-24Q4
Project Location: Joppa, Illinois
W.O. Number (s): 24100635

Monitoring Point: XSG01
Sample ID: 018
Date (s): 10/21/2024

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Affiliation:

Weather Conditions

Temp: 64 °F Wind Direction: ☐ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☒ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Locks				
Casing	<table border="1"><tr><th>Yes</th><th>No</th></tr><tr><td></td><td></td></tr></table>	Yes	No		
Yes	No				
Protective Casing	<table border="1"><tr><td></td><td></td></tr></table>				
Reference Mark/Identification	<table border="1"><tr><td></td><td></td></tr></table>				

Groundwater Level Measurements

Date/Time Measured: 10/21/2024 14:20 Static Water Level: 22.56 feet below TOC
Total Depth: - feet below TOC
Water Column: #VALUE! feet

Purging Activities

Purged By: JC Purge Date:
Purge Method: Well Diameter:
Purge Volume Calculation (L):
Actual Purge Volume (L):
Physical appearance of purge water: Odor: Color:

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
	0.0		purge start time						

Sampling Activities

Sampled By: Sample Date/Time:
Sample Method: Sample Equipment:
Sample Parameters: pH Spec. Cond. Temp
Field Filtered: Filter Type:
Water Level: feet below TOC Drawdown: feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter:
- DTW only; no sample

Form Completed By: *Justin Colp* Date: 10/21/2024



APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
Field Data Sheet
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Project Name: JOP-24Q4
Project Location: Joppa, Illinois
W.O. Number (s): 24100635
Monitoring Point: SG03
Sample ID: 019
Date (s):

Field Team Members

Name: No member found on Data Tab
Affiliation: TekLab, Inc.
Name:
Affiliation:

Weather Conditions

Temp: 62 °F
Wind Direction: ☐ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☒ NW
Precipitation: ☒ None ☐ Light ☐ Heavy
Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Locks	Yes	No
Casing	Protective Casing		
Protective Casing	Well		
Reference Mark/Identification			

Groundwater Level Measurements

Date/Time Measured: 10/21/2024 14:02
Static Water Level: 51.44 feet below TOC
Total Depth: - feet below TOC
Water Column: #VALUE! feet

Purging Activities

Purged By: Purge Date:
Purge Method: Well Diameter:
Purge Volume Calculation (L):
Actual Purge Volume (L):
Physical appearance of purge water: Odor: Color:

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (μS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
	0.0		purge start time						

Sampling Activities

Sampled By: Sample Date/Time:
Sample Method: Sample Equipment:
Sample Parameters: pH Spec. Cond. Temp
Field Filtered: Filter Type:
Water Level: feet below TOC Drawdown: feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter:
- DTW only; no sample

Form Completed By:

Paul Giddis

Date: 10/21/2024



APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Field Data Sheet

Project Name: JOP-24Q4
Project Location: Joppa, Illinois
W.O. Number (s): 24100635

Monitoring Point: Field Blank
Sample ID: 020
Date (s):

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 69 °F Wind Direction: ☒ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Locks
Casing	Yes No
Protective Casing	
Reference Mark/Identification	Well

Groundwater Level Measurements

Date/Time Measured: Static Water Level: feet below TOC
Total Depth: - feet below TOC
Water Column: #VALUE! feet

Purging Activities

Purged By: Purge Date:
Purge Method: Direct Grab Well Diameter:
Purge Volume Calculation (L):
Actual Purge Volume (L):
Physical appearance of purge water: Odor: Color:

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
	0.0		purge start time						

Sampling Activities

Sampled By: JC Sample Date/Time: 10/22/2024 13:10
Sample Method: Direct Sample Sample Equipment: Direct Grab
Sample Parameters: pH Spec. Cond. Temp
Field Filtered: Filter Type:
Water Level: feet below TOC Drawdown: feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 43918

Form Completed By: *Justin Colp* Date: 10/22/2024

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Field Data Sheet

Project Name: JOP-24Q4 Monitoring Point: G52D Duplicate
Project Location: Joppa, Illinois Sample ID: 021
W.O. Number (s): 24100635 Date (s): 10/22/2024

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 73 °F Wind Direction: ☒ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No
Casing	Good	Protective Casing		X
Protective Casing	Good			X
Reference Mark/Identification	Yes	Well		

Groundwater Level Measurements

Date/Time Measured: 10/22/2024 11:54 Static Water Level: 29.90 feet below TOC
Total Depth: 82.50 feet below TOC
Water Column: 52.60 feet

Purging Activities

Purged By: JC Purge Date: 10/22/2024
Purge Method: Bladder Pump Well Diameter: 2"
Purge Volume Calculation (L): $52.6 \text{ ft.} \times 52.6 = 1.16 \text{ L} \times 3 \text{ Vol.} = 3.48 \text{ L}$ *Based on Low-Flow (3/8" discharge)
Actual Purge Volume (L): 5.00 L
Physical appearance of purge water: Clear Odor: Slight Color: none

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (μS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
11:55	0.0	250	purge start time						
12:00	1.3	↓	6.17	649.40	15.80	2.64	-46.80	9.51	
12:03	2.0		6.19	649.70	15.75	1.74	-55.40	10.42	
12:06	2.8		6.20	649.80	15.77	1.40	-60.80	10.25	
12:09	3.5		6.20	648.90	15.72	1.17	-64.20	7.64	
12:12	4.3		6.21	648.70	15.73	1.12	-67.00	7.15	
12:15	5.0		6.21	649.10	15.79	1.04	-69.50	5.55	

Sampling Activities

Sampled By: JC Sample Date/Time: 10/22/2024 12:15
Sample Method: Low Flow Sample Equipment: Bladder Pump
Sample Parameters: 6.21 pH 649.10 Spec. Cond. 15.79 Temp
Field Filtered: No Filter Type:
Water Level: 29.99 feet below TOC Drawdown: 0.09 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 43918

Form Completed By:

Justin Colp

Date: 10/22/2024



APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Field Data Sheet

Project Name: JOP-24Q4
Project Location: Joppa, Illinois
W.O. Number (s): 24100635

Monitoring Point: Equipment Blank 1
Sample ID: 022
Date (s):

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 69 °F Wind Direction: ☒ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Locks
Casing	Yes No
Protective Casing	
Reference Mark/Identification	Well

Groundwater Level Measurements

Date/Time Measured: Static Water Level: feet below TOC
Total Depth: - feet below TOC
Water Column: #VALUE! feet

Purging Activities

Purged By: Purge Date:
Purge Method: Direct Grab Well Diameter:
Purge Volume Calculation (L):
Actual Purge Volume (L):
Physical appearance of purge water: Odor: Color:

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
	0.0		purge start time						

Sampling Activities

Sampled By: JC Sample Date/Time: 10/22/2024 13:15
Sample Method: Direct Sample Sample Equipment: Direct Grab
Sample Parameters: pH Spec. Cond. Temp
Field Filtered: Filter Type:
Water Level: feet below TOC Drawdown: feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 43918
- Collected off non-dedicated submersible pump

Form Completed By: *Justin Colp* Date: 10/22/2024



Monitoring Point:	Equipment Blank 2
Sample ID:	023
Date (s):	

Name: _____ Affiliation: _____

Name: _____ Affiliation: _____

Temp: _____ °F Wind Direction: ☐ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW

Precipitation: ☐ None ☐ Light ☐ Heavy Sky: ☐ Clear ☐ Partly Cloudy ☐ Cloudy

		Locks	
		Yes	No
Well Pad	_____		
Casing	_____		
Protective Casing	_____		
Reference Mark/Identification	_____		

Level Measurements Static Water Level: _____ feet below TOC
 Date/Time Measured: _____ Total Depth: _____ feet below TOC
 Water Column: _____ feet

Purged By: _____ Purge Date: _____
Purge Method: _____ Well Diameter: _____
Purge Volume Calculation (L): _____
Actual Purge Volume (L): _____
Physical appearance of purge water: _____ Odor: _____ Color: _____

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (μS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
	0.0		purge start time						

Sampled By: _____ Sample Date/Time: _____
 Sample Method: _____ Sample Equipment: _____
 Sample Parameters: _____ pH _____ Spec. Cond. _____ Temp _____
 Field Filtered: _____ Filter Type: _____
 Water Level: _____ feet below TOC _____ Drawdown: _____ feet

- Field Meter:
- Not used

Form Completed By: _____ **Date:** _____

Monitoring Point:	Equipment Blank 3
Sample ID:	024
Date (s):	

Name: _____ Affiliation: _____

Name: _____ Affiliation: _____

Temp: _____ °F Wind Direction: ☐ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW

Precipitation: ☐ None ☐ Light ☐ Heavy Sky: ☐ Clear ☐ Partly Cloudy ☐ Cloudy

		Locks	
		Yes	No
Well Pad	_____		
Casing	_____		
Protective Casing	_____		
Reference Mark/Identification	_____		

Level Measurements Static Water Level: _____ feet below TOC
 Date/Time Measured: _____ Total Depth: _____ feet below TOC
 Water Column: _____ feet

Purged By: _____ Purge Date: _____
Purge Method: _____ Well Diameter: _____
Purge Volume Calculation (L): _____
Actual Purge Volume (L): _____
Physical appearance of purge water: _____ Odor: _____ Color: _____

[illegible]

Sampled By: _____ Sample Date/Time: _____
 Sample Method: _____ Sample Equipment: _____
 Sample Parameters: _____ pH _____ Spec. Cond. _____ Temp _____
 Field Filtered: _____ Filter Type: _____
 Water Level: _____ feet below TOC _____ Drawdown: _____ feet

- Field Meter:
- Not used

Form Completed By: _____ **Date:** _____

APPENDIX A.

ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Field Data Sheet

Project Name: JOP-24Q4 Monitoring Point: G15D
 Project Location: Joppa, Illinois Sample ID: 025
 W.O. Number (s): 24100635 Date (s): 10/22/2024

Field Team Members

Name: Brett Gillihan Affiliation: TekLab, Inc.
 Name: _____ Affiliation: _____

Weather Conditions

Temp: 62 °F Wind Direction: ☒ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW
 Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No
Casing	Good	Protective Casing	X	
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 10/22/2024 9:55 Static Water Level: 41.52 feet below TOC
 Total Depth: 111.05 feet below TOC
 Water Column: 69.53 feet

Purging Activities

Purged By: BG Purge Date: 10/22/2024
 Purge Method: Bladder Pump Well Diameter: 2"
 Purge Volume Calculation (L): 69.526 ft. x 69.526 = 1.53 L x 3 Vol. = 4.59 L **Based on Low-Flow (3/8" discharge)*
 Actual Purge Volume (L): 5.00 L
 Physical appearance of purge water: Slightly cloudy Odor: None Color: Clear

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
9:55	0.0	106	purge start time						
10:18	2.4	↓	7.51	5.90	15.99	8.85	-7.20	12.72	
10:21	2.8		7.11	829.30	15.32	1.61	0.90	189.70	
10:24	3.1		7.10	824.50	15.22	0.86	-0.10	155.51	
10:27	3.4		7.10	824.20	15.21	0.72	-1.30	134.27	
10:30	3.7		7.10	823.00	15.17	0.65	-2.40	97.99	
10:33	4.0		7.09	822.20	15.19	0.61	-3.50	86.17	
10:36	4.4		7.09	823.30	15.23	0.62	-4.00	67.96	
10:39	4.7		7.09	824.00	15.29	0.63	-4.60	64.48	
10:42	5.0		7.09	824.80	15.34	0.63	-5.20	63.37	

Sampling Activities

Sampled By: BG Sample Date/Time: 10/22/2024 10:42
 Sample Method: Low Flow Sample Equipment: Bladder Pump
 Sample Parameters: 7.09 pH 824.80 Spec. Cond. 15.34 Temp _____
 Field Filtered: No Filter Type: _____
 Water Level: 41.32 feet below TOC Drawdown: -0.20 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 223357

Form Completed By: Brett Gillihan

Date: 10/22/2024



APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
Field Data Sheet
JOPPA POWER PLANT, EAST ASH POND
JOP-257-401

Project Name: JOP-24Q4
Project Location: Joppa, Illinois
W.O. Number (s): 24100635

Monitoring Point: PTW01
Sample ID: 026
Date (s): 10/22/2024

Field Team Members

Name: Brett Gillihan Affiliation: TekLab, Inc.
Name: Affiliation:

Weather Conditions

Temp: 73 °F Wind Direction: ☒ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE
☐ NW
Precipitation: ☒ None ☐ Light ☐ Heavy Sky: ☒ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good	Locks	Yes	No
Casing	Good	Protective Casing	X	
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 10/22/2024 12:09 Static Water Level: 41.03 feet below TOC
Total Depth: feet below TOC
Water Column: feet

Purging Activities

Purged By: BG Purge Date: 10/22/2024
Purge Method: Submersible Pump Well Diameter: 4"
Purge Volume Calculation (L): *Based on Low-Flow (3/8" discharge)
Actual Purge Volume (L): 3.50 L
Physical appearance of purge water: Slightly cloudy Odor: None Color: Clear

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
12:09	0.0	130	purge start time						
12:23	1.8	↓	7.75	593.60	19.50	4.54	61.20	4.00	
12:26	2.2		7.53	988.40	21.03	3.74	78.30	3.62	
12:29	2.6		7.55	1,199.70	18.72	3.20	90.10	6.82	
12:32	3.0		7.46	1,201.40	20.35	3.54	91.30	4.24	
12:35	3.4		7.41	1,203.80	23.72	3.41	97.60	4.98	

Sampling Activities

Sampled By: BG Sample Date/Time: 10/22/2024 12:35
Sample Method: Low Flow Sample Equipment: Submersible Pump
Sample Parameters: 7.41 pH 1,203.80 Spec. Cond. 23.72 Temp
Field Filtered: No Filter Type:
Water Level: 41.98 feet below TOC Drawdown: 0.95 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 223357

Form Completed By:




Date: 10/22/2024

Site Sampling Event: JOP-24Q4

LIMS Workorder: 24100635

Technician(s): DC, JC, BG

Field Calibration Log(s)

Joppa- 4Q 2024

Field Temp SOP 1156 - SM 2550 B

Field pH SOP 1152 - SW-846 9040B - SM 4500-H B

Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 43918 Technician(s): justin colp Date: 10/21/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc240612a	4.00	10/21/24 10:45
7.0 Buffer	wc240913b	7.00	10/21/24 10:40
10.0 Buffer	wc240625b	10.00	10/21/24 10:49
LCS/CCV (7.0 Buffer)	wc240913c		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 μ S Std.	100029	1412	10/21/24 10:54

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.13	10/21/24 10:54
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity μ S	Turbidity NTU	ORP mV	D.O. %
LCS-1-JC	LCS	10/21/24 10:56	21.1	7.02	1,408	0.11		
CCV-1-JC	CCV	10/21/24 15:32	23.1	7.05	1,426	0.65		

Comments: _____

Field Meter ID: Pine 43918 Technician(s): justin colp Date: 10/22/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc240612a	4.00	10/22/24 7:40
7.0 Buffer	wc240913b	7.00	10/22/24 7:36
10.0 Buffer	wc240625b	10.00	10/22/24 7:46
LCS/CCV (7.0 Buffer)	wc240913c		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 μ S Std.	100029	1412	10/22/24 7:50

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.23	10/22/24 7:50
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity μ S	Turbidity NTU	ORP mV	D.O. %
LCS-2-JC	LCS	10/22/24 7:54	12.3	7.03	1,410	0.25		
CCV-2-JC	CCV	10/22/24 12:49	21.4	7.07	1,422	0.31		

Comments: _____

Site Sampling Event: JOP-24Q4

LIMS Workorder: 24100635

Technician(s): DC, JC, BG

Field Calibration Log(s)

Joppa- 4Q 2024

Field Temp SOP 1156 - SM 2550 B
 Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
 Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 223357 Technician(s): Brett Gillihan Date: 10/22/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc240612a	4.01	10/22/24 7:42
7.0 Buffer	wc240913b	6.99	10/22/24 7:38
10.0 Buffer	wc240625b	10.00	10/22/24 7:46
LCS/CCV (7.0 Buffer)	wc240913c		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 μ S Std.	100029	1419	10/22/24 7:51

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	1.5	10/22/24 7:58
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity μ S	Turbidity NTU	ORP mV	D.O. %
LCS-1	LCS	10/23/24 13:34	19.7	7.00	1,419	1.5		
CCV-1	CCV	10/22/24 13:03	21.8	7.01	1,419	1.5		

Comments: _____



INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

797 Cromwell Park Dr.
Suite Q
Glen Burnie, MD 21061

Pine Environmental Services, Inc.

Instrument ID 43918
Description YSI Pro DSS
Calibrated 9/30/2024 12:11:47PM

Group # 5				Range Acc % 0.0000			
Group Name Dissolved Oxygen Span				Reading Acc % 3.0000			
Stated Accy Pct of Reading				Plus/Minus 0.0			
<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
100.0 / 100.0	%	100.0	%	96.6	100.0	0.00%	Pass

<u>Test Instruments Used During the Calibration</u>					<u>(As Of Cal Entry Date)</u>	
<u>Test Standard ID</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Model Number</u>	<u>Serial Number / Lot Number</u>	<u>Last Cal Date / Opened Date</u>	<u>Next Cal Date / Expiration Date</u>
MD COND 1.413 3GH1514	CA 1.413 COND (LOT# 4GB0749	GFS	31986	1.413 COND (LOT# 4GB0749		2/5/2025
MD ORP 240 4GE1370	MD ORP 240 4GE1370	AquaPhoenix Scientific	32001	4GE1370	6/24/2024	2/28/2025
MD PH10 2GI302	MD PH10 2GI302	AquaPhoenix Scientific	32034	2GI302		9/30/2024
MD PH4 3GI0465	MD PH4 3GI0465	AquaPhoenix Scientific	32017	3GI0465		9/30/2025
MD PH7 2GI0389	MD PH7 2GI0389	AquaPhoenix Scientific	32025	3GI0389	12/20/2024	9/30/2025
MD TURB 0 NTU 24007124	MD TURB 0 NTU 24007124	AMCOCLEAR	8483	24007124	2/1/2024	12/31/2024

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Chuck Wallace

All instruments are calibrated by Pine Environmental Services LLC according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services LLC of any defect within 24 hours of receipt of equipment
Please call 800-301-9663 for Technical Assistance



INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

797 Cromwell Park Dr.
Suite Q
Glen Burnie, MD 21061

Pine Environmental Services, Inc.

Instrument ID 43918
Description YSI Pro DSS
Calibrated 9/30/2024 12:11:47PM

Manufacturer YSI
Model Number Pro DSS
Serial Number/ Lot 18K101874
Number
Location Maryland
Department

State Certified
Status Pass
Temp °C 23
Humidity % 69

Calibration Specifications

Group # 1
Group Name PH
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
7.00 / 7.00	PH	7.00	PH	6.90	7.00	0.00%	Pass
4.00 / 4.00	PH	4.00	PH	3.94	4.00	0.00%	Pass
10.00 / 10.00	PH	10.00	PH	10.03	10.00	0.00%	Pass

Group # 2
Group Name Turbidity
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
0.00 / 0.00	FNU	0.00	FNU	0.70	0.00	0.00%	Pass
124.00 / 124.00	FNU	124.00	FNU	130.54	124.00	0.00%	Pass

Group # 3
Group Name Conductivity
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.000

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
1.413 / 1.413	ms/cm	1.413	ms/cm	1.323	1.413	0.00%	Pass

Group # 4
Group Name Redox (ORP)
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
240.00 / 240.00	mv	240.00	mv	247.60	240.00	0.00%	Pass

Group # 5
Group Name Dissolved Oxygen Span
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.0

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>



INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

10521 Research Drive
Suite 102
Knoxville, TN 37932
Toll-free: (865) 777-1418

Pine Environmental Services, Inc.

Instrument ID 223357
Description YSI Pro DSS Sonde
Calibrated 9/26/2024 10:44:47AM

Group # 5		Range Acc % 0.0000	
Group Name Dissolved Oxygen Span		Reading Acc % 3.0000	
Stated Accy Pct of Reading		Plus/Minus 0.00	
<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>
100.00 / 100.00	%	100.00	%
<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
99 10	100.00	0.00%	Pass

<u>Test Instruments Used During the Calibration</u>					<u>(As Of Cal Entry Date)</u>	
<u>Test Standard ID</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Model Number</u>	<u>Serial Number / Lot Number</u>	<u>Last Cal Date/</u>	<u>Next Cal Date / Expiration Date</u>
					<u>Opened Date</u>	
TN 1.413 3GL1056	TN 1.413 3GL1056	AquaPhoenix Scientific	31986	3GL1056		12/21/2024
TN 126 TURB NTU	TN TURB 126 NTU	YSI	607300	24G24012705		7/30/2025
TN AUTOCAL 24010121	TN AUTOCAL 24010121	GFS	8483	24010121		4/29/2025
TN ORP 4GD1716	TN ORP 4GD1716	AquaPhoenix Scientific	32001	4GD1716		1/1/2025
TN PH10 2GJ290	TN PH10 2GJ290	AquaPhoenix Scientific	32034	2GJ290		10/21/2024
TN PH4 3GL0108	TN PH4 3GL0108	AquaPhoenix Scientific	32017	3GL0108		12/21/2024
TN PH7 4GA0071	TN PH7 4GA0071	AquaPhoenix Scientific	32025	4GA0071		1/25/2025

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Justin C. Moore

All instruments are calibrated by Pine Environmental Services LLC according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services LLC of any defect within 24 hours of receipt of equipment
Please call 800-301-9663 for Technical Assistance



INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

10521 Research Drive
Suite 102
Knoxville, TN 37932
Toll-free: (865) 777-1418

Pine Environmental Services, Inc.

Instrument ID 223357
Description YSI Pro DSS Sonde
Calibrated 9/26/2024 10:44:47AM

Manufacturer YSI	State Certified
Model Number Pro DSS	Status Pass
Serial Number/ Lot 24b105093	Temp °C 73
Number	
Location Tennessee	Humidity % 64
Department	

Calibration Specifications

Group # 1
Group Name PH
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
7.00 / 7.00	PH	7.00	PH	6.99	7.00	0.00%	Pass
4.00 / 4.00	PH	4.00	PH	4.12	4.00	0.00%	Pass
10.00 / 10.00	PH	10.00	PH	9.97	10.00	0.00%	Pass

Group # 2
Group Name Turbidity
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
0.00 / 0.00	NTU	0.00	NTU	0.81	0.00	0.00%	Pass
124.00 / 124.00	NTU	124.00	NTU	119.56	124.00	0.00%	Pass

Group # 3
Group Name Conductivity
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.000

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
1.413 / 1.413	ms/cm	1.413	ms/cm	1.421	1.413	0.00%	Pass

Group # 4
Group Name Redox (ORP)
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

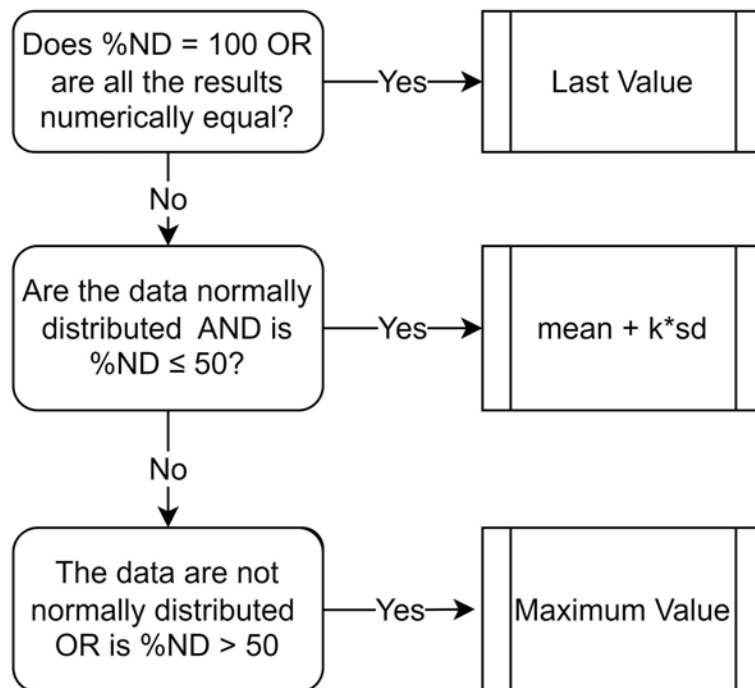
<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
240.00 / 240.00	mv	240.00	mv	217.50	240.00	0.00%	Pass

Group # 5
Group Name Dissolved Oxygen Span
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

APPENDIX B
STATISTICAL METHODOLOGY FOR DETERMINATION
OF BACKGROUND VALUES

Notes
%ND = Percent non-detected samples
sd = standard deviation
k = kappa for tolerance limit (95% confidence/95% coverage)



APPENDIX C
STATISTICAL METHODOLOGY FOR DETERMINATION OF
STATISTICALLY SIGNIFICANT LEVELS

Notes
%ND = Percent non-detected samples
MK = Mann-Kendall Trend Test
<u>Alpha Levels</u>
Normality = 0.01
MK Trend = 0.01
Residuals = 0.01
Confidence Level= 0.01

