

Prepared for  
**Electric Energy, Inc.**

Date  
**January 31, 2024**

Project No.  
**1940103649-011**

**2023 40 C.F.R. § 257 ANNUAL  
GROUNDWATER MONITORING AND  
CORRECTIVE ACTION REPORT  
EAST ASH POND  
JOPPA POWER PLANT  
JOPPA, ILLINOIS  
CCR UNIT 401**

**2023 40 C.F.R. § 257 ANNUAL GROUNDWATER  
MONITORING AND CORRECTIVE ACTION REPORT  
JOPPA POWER PLANT EAST ASH POND**

Project name **Joppa Power Plant East Ash Pond**  
Project no. **1940103649-011**  
Recipient **Electric Energy, Inc.**  
Document type **Annual Groundwater Monitoring and Corrective Action Report**  
Version **FINAL**  
Date **January 31, 2024**  
Prepared by **Melanie K. Conklin**  
Checked by **Lauren D. Cook**  
Approved by **Brian G. Hennings**  
Description **Annual Report required by 40 C.F.R. § 257.90(e)**

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

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



---

**Melanie K. Conklin**  
Senior Project Engineer



---

**Brian G. Hennings, PG**  
Project Officer, Hydrogeology

## CONTENTS

<b>EXECUTIVE SUMMARY</b>	<b>3</b>
<b>1. Introduction</b>	<b>4</b>
<b>2. Monitoring and Corrective Action Program Status</b>	<b>6</b>
<b>3. Key Actions Completed in 2023</b>	<b>7</b>
<b>4. Problems Encountered and Actions to Resolve the Problems</b>	<b>9</b>
<b>5. Key Activities Planned for 2024</b>	<b>10</b>
<b>6. References</b>	<b>11</b>

### TABLES (IN TEXT)

Table A	2023 Assessment Monitoring Program Summary
---------	--

### TABLES (ATTACHED)

Table 1	Groundwater Elevation Data
Table 2	Analytical Results - Appendix III Parameters
Table 3	Analytical Results - Appendix IV Parameters
Table 4	Statistical Background Values
Table 5	Groundwater Protection Standards
Table 6	Determination of Statistically Significant Levels

### FIGURES (ATTACHED)

Figure 1	Monitoring Well Location Map
Figure 2	Potentiometric Surface Map, March 7 and 10, 2023
Figure 3	Potentiometric Surface Map, May 1, 2023
Figure 4	Potentiometric Surface Map, September 25, 2023
Figure 5	Potentiometric Surface Map, October 23, 2023

### APPENDICES

Appendix A	Laboratory Reports and Field Data Sheets
Appendix B	Statistical Methodology for Determination of Background Values
Appendix C	Statistical Methodology for Determination of Statistically Significant Levels

## 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
A6	Quarter 1, 2023 Assessment Monitoring sampling event
A6R	Quarter 2, 2023 Assessment Monitoring sampling event
A6D	Quarter 3, 2023 Assessment Monitoring sampling event
A6DR	Quarter 4, 2023 Assessment Monitoring sampling event
ADD	Additional sample events outside of quarterly events
ASD	Alternative Source Demonstration
CCR	coal combustion residuals
CMA	Corrective Measures Assessment
EAP	East Ash Pond
GWPS	groundwater protection standard
IEPA	Illinois Environmental Protection Agency
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
TBD	to be determined



## EXECUTIVE SUMMARY

This report has been prepared to provide the information required by Title 40 of the Code of Federal Regulations (40 C.F.R.) § 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.

As discussed in **Section 3** of this annual report, the monitoring system was updated in 2023 to use the same monitoring system developed for compliance with Title 35 of the Illinois Administrative Code (35 I.A.C.) § 845, which was submitted to the Illinois Environmental Protection Agency (IEPA) via an operating permit application.

No Statistically significant levels (SSLs) of 40 C.F.R. § 257 Appendix IV parameters over groundwater protection standards (GWPSs) were determined in 2023. Since no SSLs of 40 C.F.R. § 257 Appendix IV parameters over GWPSs were determined in 2023, 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 3**).
5. Other information required to be included in the annual report as specified in §§ 257.90 through 257.98.
6. A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit (see **Executive Summary**). At a minimum, the summary must specify all of the following:
  - i. At the start of the current annual reporting period, whether the CCR unit was operating under the Detection Monitoring Program in §257.94 or the Assessment Monitoring Program in §257.95.
  - ii. At the end of the current annual reporting period, whether the CCR unit was operating under the Detection Monitoring Program in §257.94 or the Assessment Monitoring Program in §257.95.
  - iii. If it was determined that there was a 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 2023.

## **2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS**

No changes have occurred to the monitoring program status in calendar year 2023 and the EAP remains in the Assessment Monitoring Program in accordance with 40 C.F.R. § 257.95.

### 3. KEY ACTIONS COMPLETED IN 2023

A summary of the samples collected from background and compliance monitoring wells in 2023 under the Assessment Monitoring Program is included in **Table A** on the following page. The groundwater monitoring system, including the CCR unit and all background and compliance monitoring wells, is presented in **Figure 1**. Beginning in 2023, the monitoring system was updated to be consistent with that proposed for compliance with 35 I.A.C. § 845, which includes all of the monitoring wells used in the 2022 40 C.F.R. § 257 monitoring system (Ramboll, 2022a). No wells were installed or decommissioned in 2023 (the wells added from the 35 I.A.C. § 845 monitoring system were installed prior to 2023).

One groundwater sample was collected from each background and compliance well during each monitoring event. The EAP is also regulated under 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 2023 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. § 257.95(d)(1); however, SSLs are reported semiannually per 40 C.F.R. § 257.

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 2023 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, 2022b), the Multi-Site Quality Assurance Project Plan (Ramboll, 2022c), and the Multi-Site Data Management Plan (Ramboll, 2022d) 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 GWPSs in **Table 5**. A flow chart showing the statistical methodology for determination of background values is included as **Appendix B**. A summary of the determination of SSLs is included in **Table 6**. A flow chart showing the statistical methodology for determination of SSLs is included as **Appendix C**.

**Table A. 2023 Assessment Monitoring Program Summary**

<b>Event ID</b>	<b>Sampling Dates</b> <sup>1, 2, 3</sup>	<b>Analytical Data Receipt Date</b> <sup>4, 5</sup>	<b>SSL(s) Determination Date</b>	<b>SSL(s)</b>	<b>ASD Completion Date</b>
A6	March 7 - 10, 2023	April 24, 2023	July 24, 2023	None	NA
A6R	May 2 - 3, 2023	June 23, 2023	NA	NA	NA
A6D	September 25 - 27, 2023	November 16, 2023	February 14, 2024	TBD	TBD
A6DR	October 23 - 25, 2023	December 1, 2023	NA	NA	NA

**Notes:**

ASD: Alternative Source Demonstration

NA: not applicable

TBD: to be determined in 2024

<sup>1</sup> 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).

<sup>2</sup> The following background wells were sampled for each event: G01D and G02D

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

<sup>4</sup> 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.

<sup>5</sup> Additional samples were collected from wells G01D and G02D and are identified on Table 2 and Table 3 as ADD events. The data 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.

## **4. PROBLEMS ENCOUNTERED AND ACTIONS TO RESOLVE THE PROBLEMS**

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

## 5. KEY ACTIVITIES PLANNED FOR 2024

The following key activities are planned for 2024:

- Continuation of the Assessment Monitoring Program with semiannual sampling for reporting purposes scheduled for the first and third quarters of 2024 (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 2024 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. 40 C.F.R. § 257 Groundwater Monitoring Plan, the East Ash Pond, Joppa Power Plant, Joppa, Illinois. December 28, 2022.

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

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

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2022d. 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**  
 2023 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	03/07/2023	41.23	322.96
G01D	Background	UA	04/01/2023	39.63	324.55
G01D	Background	UA	05/01/2023	40.52	323.66
G01D	Background	UA	06/10/2023	43.20	320.98
G01D	Background	UA	07/10/2023	44.34	319.85
G01D	Background	UA	08/25/2023	43.55	320.64
G01D	Background	UA	09/25/2023	44.38	319.81
G01D	Background	UA	10/23/2023	44.88	319.31
G01D	Background	UA	11/08/2023	44.45	319.74
G01D	Background	UA	12/12/2023	45.42	318.77
G02D	Background	UA	03/07/2023	41.57	322.08
G02D	Background	UA	05/01/2023	40.94	322.71
G02D	Background	UA	07/11/2023	43.93	319.72
G02D	Background	UA	09/25/2023	44.46	319.19
G02D	Background	UA	10/23/2023	45.10	318.55
G02D	Background	UA	11/08/2023	44.74	318.91
G02D	Background	UA	12/12/2023	45.61	318.04
G03	Compliance	UA	03/07/2023	36.41	321.46
G03	Compliance	UA	04/01/2023	35.21	322.65
G03	Compliance	UA	05/01/2023	35.80	322.06
G03	Compliance	UA	06/10/2023	37.52	320.35
G03	Compliance	UA	07/10/2023	38.81	319.06
G03	Compliance	UA	08/25/2023	38.42	319.45
G03	Compliance	UA	09/25/2023	39.40	318.47
G03	Compliance	UA	10/23/2023	39.98	317.89
G03	Compliance	UA	11/08/2023	39.64	318.23
G03	Compliance	UA	12/12/2023	40.56	317.31
G05	Compliance	UA	03/07/2023	41.05	320.16
G05	Compliance	UA	04/01/2023	39.23	321.97
G05	Compliance	UA	05/01/2023	40.85	320.36
G05	Compliance	UA	07/10/2023	43.38	317.83
G05	Compliance	UA	09/25/2023	44.31	316.90
G05	Compliance	UA	10/23/2023	44.92	316.29
G05	Compliance	UA	11/07/2023	44.72	316.49
G05	Compliance	UA	12/12/2023	45.52	315.69
G06	Compliance	UA	03/07/2023	36.60	318.64
G06	Compliance	UA	05/01/2023	37.95	317.29
G06	Compliance	UA	07/10/2023	40.89	314.35
G06	Compliance	UA	09/25/2023	41.10	314.14
G06	Compliance	UA	10/23/2023	41.93	313.31
G06	Compliance	UA	11/07/2023	41.72	313.52
G06	Compliance	UA	12/12/2023	42.43	312.81
G07	Compliance	UA	03/07/2023	36.24	317.29
G07	Compliance	UA	04/01/2023	35.17	318.35
G07	Compliance	UA	05/01/2023	38.08	315.44
G07	Compliance	UA	06/10/2023	39.99	313.54

**TABLE 1**  
**GROUNDWATER ELEVATION DATA**  
 2023 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)
G07	Compliance	UA	07/10/2023	40.98	312.55
G07	Compliance	UA	08/25/2023	40.86	312.66
G07	Compliance	UA	09/25/2023	41.52	312.01
G07	Compliance	UA	10/23/2023	42.00	311.53
G07	Compliance	UA	11/07/2023	41.83	311.70
G07	Compliance	UA	12/12/2023	42.46	311.07
G08	Compliance	UA	03/07/2023	25.82	317.72
G08	Compliance	UA	04/01/2023	24.91	318.62
G08	Compliance	UA	05/01/2023	29.61	313.92
G08	Compliance	UA	07/10/2023	32.22	311.32
G08	Compliance	UA	09/25/2023	32.69	310.85
G08	Compliance	UA	10/23/2023	33.15	310.39
G08	Compliance	UA	11/07/2023	32.96	310.58
G08	Compliance	UA	12/12/2023	33.49	310.05
G09	Compliance	UA	03/07/2023	32.84	318.86
G09	Compliance	UA	04/01/2023	52.53	319.04
G09	Compliance	UA	05/01/2023	58.93	312.64
G09	Compliance	UA	06/10/2023	40.41	311.29
G09	Compliance	UA	07/10/2023	41.10	310.60
G09	Compliance	UA	08/25/2023	40.91	310.79
G09	Compliance	UA	09/25/2023	41.48	310.22
G09	Compliance	UA	10/23/2023	41.92	309.78
G09	Compliance	UA	11/07/2023	41.72	309.98
G09	Compliance	UA	12/12/2023	42.24	309.46
G10	Compliance	UA	03/07/2023	33.78	319.71
G10	Compliance	UA	04/01/2023	33.16	320.32
G10	Compliance	UA	05/01/2023	39.23	314.25
G10	Compliance	UA	06/10/2023	40.54	312.95
G10	Compliance	UA	07/10/2023	41.40	312.09
G10	Compliance	UA	08/25/2023	40.94	312.55
G10	Compliance	UA	09/25/2023	41.80	311.69
G10	Compliance	UA	10/23/2023	42.30	311.19
G10	Compliance	UA	11/07/2023	42.04	311.45
G10	Compliance	UA	12/12/2023	42.62	310.87
G11	Compliance	UA	03/07/2023	44.26	322.29
G11	Compliance	UA	04/01/2023	44.15	323.46
G11	Compliance	UA	05/01/2023	46.16	321.45
G11	Compliance	UA	06/10/2023	48.17	318.38
G11	Compliance	UA	07/10/2023	48.80	317.75
G11	Compliance	UA	08/25/2023	48.21	318.34
G11	Compliance	UA	09/25/2023	48.69	317.86
G11	Compliance	UA	10/23/2023	49.30	317.25
G11	Compliance	UA	11/08/2023	49.00	317.55
G11	Compliance	UA	12/12/2023	49.80	316.75
G51D	Compliance	UA	03/07/2023	41.63	322.22
G51D	Compliance	UA	05/01/2023	41.82	322.03

**TABLE 1**  
**GROUNDWATER ELEVATION DATA**  
 2023 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)
G51D	Compliance	UA	06/10/2023	43.85	320.00
G51D	Compliance	UA	07/10/2023	44.91	318.94
G51D	Compliance	UA	08/25/2023	46.98	316.87
G51D	Compliance	UA	09/25/2023	45.40	318.45
G51D	Compliance	UA	10/23/2023	46.04	317.81
G51D	Compliance	UA	11/08/2023	45.64	318.21
G51D	Compliance	UA	12/12/2023	46.53	317.32
G52D	Compliance	UA	03/07/2023	28.00	320.41
G52D	Compliance	UA	04/01/2023	29.03	318.79
G52D	Compliance	UA	05/01/2023	26.57	321.25
G52D	Compliance	UA	05/02/2023	27.12	321.29
G52D	Compliance	UA	06/10/2023	26.90	321.51
G52D	Compliance	UA	07/10/2023	26.82	321.59
G52D	Compliance	UA	08/25/2023	29.10	319.31
G52D	Compliance	UA	09/25/2023	28.81	319.60
G52D	Compliance	UA	10/23/2023	31.11	317.30
G52D	Compliance	UA	11/07/2023	34.10	314.31
G52D	Compliance	UA	12/12/2023	30.40	318.01
G53D	Compliance	UA	03/07/2023	35.35	320.12
G53D	Compliance	UA	05/01/2023	35.75	319.72
G53D	Compliance	UA	06/10/2023	37.62	317.85
G53D	Compliance	UA	07/10/2023	38.68	316.79
G53D	Compliance	UA	08/25/2023	38.50	316.97
G53D	Compliance	UA	09/25/2023	39.22	316.25
G53D	Compliance	UA	10/23/2023	39.82	315.65
G53D	Compliance	UA	11/07/2023	39.38	316.09
G53D	Compliance	UA	12/12/2023	40.23	315.24
G54D	Compliance	UA	03/07/2023	35.99	321.04
G54D	Compliance	UA	04/01/2023	35.56	321.46
G54D	Compliance	UA	05/01/2023	41.25	315.77
G54D	Compliance	UA	06/10/2023	42.66	314.37
G54D	Compliance	UA	07/10/2023	43.52	313.51
G54D	Compliance	UA	09/25/2023	43.85	313.18
G54D	Compliance	UA	10/23/2023	44.38	312.65
G54D	Compliance	UA	11/07/2023	44.05	312.98
G54D	Compliance	UA	12/12/2023	44.74	312.29
XSG01	Water Level	CCR	03/07/2023	12.00	359.78
XSG01	Water Level	CCR	05/15/2023	2.39	369.39
SG02	Water Level	SW	03/11/2023	NA	286.15

**Notes:**

Only wells with groundwater elevations measured are included.

BMP = below measuring point

NA = not available/not applicable

NAVD88 = North American Vertical Datum of 1988

Monitored Unit Abbreviations:

CCR = coal combustion residuals

SW = surface water

UA = uppermost aquifer

**TABLE 2**  
**ANALYTICAL RESULTS - APPENDIX III PARAMETERS**  
2023 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	Background	SSI Type
G01D	UA	Background	01/24/2023	ADD	Boron, total	mg/L	0.022 J	NA	NA
G01D	UA	Background	03/07/2023	A6	Boron, total	mg/L	0.0290	NA	NA
G01D	UA	Background	05/02/2023	A6R	Boron, total	mg/L	0.0210	NA	NA
G01D	UA	Background	09/25/2023	A6D	Boron, total	mg/L	0.03 UJ	NA	NA
G01D	UA	Background	10/23/2023	A6DR	Boron, total	mg/L	0.014 J	NA	NA
G01D	UA	Background	01/24/2023	ADD	Calcium, total	mg/L	27.4	NA	NA
G01D	UA	Background	03/07/2023	A6	Calcium, total	mg/L	23.0	NA	NA
G01D	UA	Background	05/02/2023	A6R	Calcium, total	mg/L	28.8	NA	NA
G01D	UA	Background	09/25/2023	A6D	Calcium, total	mg/L	31.1	NA	NA
G01D	UA	Background	10/23/2023	A6DR	Calcium, total	mg/L	33.0	NA	NA
G01D	UA	Background	01/24/2023	ADD	Chloride, total	mg/L	9.00	NA	NA
G01D	UA	Background	03/07/2023	A6	Chloride, total	mg/L	5.00	NA	NA
G01D	UA	Background	05/02/2023	A6R	Chloride, total	mg/L	10.0	NA	NA
G01D	UA	Background	09/25/2023	A6D	Chloride, total	mg/L	11.0	NA	NA
G01D	UA	Background	10/23/2023	A6DR	Chloride, total	mg/L	13.0	NA	NA
G01D	UA	Background	01/24/2023	ADD	Fluoride, total	mg/L	0.190	NA	NA
G01D	UA	Background	03/07/2023	A6	Fluoride, total	mg/L	0.210	NA	NA
G01D	UA	Background	05/02/2023	A6R	Fluoride, total	mg/L	0.220	NA	NA
G01D	UA	Background	09/25/2023	A6D	Fluoride, total	mg/L	0.210	NA	NA
G01D	UA	Background	10/23/2023	A6DR	Fluoride, total	mg/L	0.200 J+	NA	NA
G01D	UA	Background	01/24/2023	ADD	pH (field)	SU	6.6	NA	NA
G01D	UA	Background	03/07/2023	A6	pH (field)	SU	6.5	NA	NA
G01D	UA	Background	05/02/2023	A6R	pH (field)	SU	6.3	NA	NA
G01D	UA	Background	09/25/2023	A6D	pH (field)	SU	6.5	NA	NA
G01D	UA	Background	10/23/2023	A6DR	pH (field)	SU	6.4	NA	NA
G01D	UA	Background	01/24/2023	ADD	Sulfate, total	mg/L	24.0	NA	NA
G01D	UA	Background	03/07/2023	A6	Sulfate, total	mg/L	36.0	NA	NA
G01D	UA	Background	05/02/2023	A6R	Sulfate, total	mg/L	26.0	NA	NA
G01D	UA	Background	09/25/2023	A6D	Sulfate, total	mg/L	28.0	NA	NA
G01D	UA	Background	10/23/2023	A6DR	Sulfate, total	mg/L	30.0	NA	NA
G01D	UA	Background	01/24/2023	ADD	Total Dissolved Solids	mg/L	332	NA	NA
G01D	UA	Background	03/07/2023	A6	Total Dissolved Solids	mg/L	308	NA	NA
G01D	UA	Background	05/02/2023	A6R	Total Dissolved Solids	mg/L	336	NA	NA
G01D	UA	Background	09/25/2023	A6D	Total Dissolved Solids	mg/L	350	NA	NA
G01D	UA	Background	10/23/2023	A6DR	Total Dissolved Solids	mg/L	308	NA	NA
G02D	UA	Background	01/24/2023	ADD	Boron, total	mg/L	0.0311	NA	NA
G02D	UA	Background	03/08/2023	A6	Boron, total	mg/L	0.0270	NA	NA
G02D	UA	Background	05/03/2023	A6R	Boron, total	mg/L	0.0412	NA	NA
G02D	UA	Background	09/25/2023	A6D	Boron, total	mg/L	0.0401	NA	NA
G02D	UA	Background	10/23/2023	A6DR	Boron, total	mg/L	0.0276	NA	NA
G02D	UA	Background	01/24/2023	ADD	Calcium, total	mg/L	35.9	NA	NA
G02D	UA	Background	03/08/2023	A6	Calcium, total	mg/L	37.3	NA	NA
G02D	UA	Background	05/03/2023	A6R	Calcium, total	mg/L	38.7	NA	NA
G02D	UA	Background	09/25/2023	A6D	Calcium, total	mg/L	33.7	NA	NA
G02D	UA	Background	10/23/2023	A6DR	Calcium, total	mg/L	34.0	NA	NA
G02D	UA	Background	01/24/2023	ADD	Chloride, total	mg/L	23.0	NA	NA

**TABLE 2**  
**ANALYTICAL RESULTS - APPENDIX III PARAMETERS**  
2023 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	Background	SSI Type
G02D	UA	Background	03/08/2023	A6	Chloride, total	mg/L	21.0	NA	NA
G02D	UA	Background	05/03/2023	A6R	Chloride, total	mg/L	21.0	NA	NA
G02D	UA	Background	09/25/2023	A6D	Chloride, total	mg/L	21.0	NA	NA
G02D	UA	Background	10/23/2023	A6DR	Chloride, total	mg/L	22.0	NA	NA
G02D	UA	Background	01/24/2023	ADD	Fluoride, total	mg/L	0.210	NA	NA
G02D	UA	Background	03/08/2023	A6	Fluoride, total	mg/L	0.200	NA	NA
G02D	UA	Background	05/03/2023	A6R	Fluoride, total	mg/L	0.220	NA	NA
G02D	UA	Background	09/25/2023	A6D	Fluoride, total	mg/L	0.210	NA	NA
G02D	UA	Background	10/23/2023	A6DR	Fluoride, total	mg/L	0.190 J+	NA	NA
G02D	UA	Background	01/24/2023	ADD	pH (field)	SU	6.6	NA	NA
G02D	UA	Background	03/08/2023	A6	pH (field)	SU	6.6	NA	NA
G02D	UA	Background	05/03/2023	A6R	pH (field)	SU	6.5	NA	NA
G02D	UA	Background	09/25/2023	A6D	pH (field)	SU	6.4	NA	NA
G02D	UA	Background	10/23/2023	A6DR	pH (field)	SU	6.4	NA	NA
G02D	UA	Background	01/24/2023	ADD	Sulfate, total	mg/L	12.0	NA	NA
G02D	UA	Background	03/08/2023	A6	Sulfate, total	mg/L	11.0	NA	NA
G02D	UA	Background	05/03/2023	A6R	Sulfate, total	mg/L	13.0	NA	NA
G02D	UA	Background	09/25/2023	A6D	Sulfate, total	mg/L	15.0	NA	NA
G02D	UA	Background	10/23/2023	A6DR	Sulfate, total	mg/L	15.0	NA	NA
G02D	UA	Background	01/24/2023	ADD	Total Dissolved Solids	mg/L	140	NA	NA
G02D	UA	Background	03/08/2023	A6	Total Dissolved Solids	mg/L	218	NA	NA
G02D	UA	Background	05/03/2023	A6R	Total Dissolved Solids	mg/L	230	NA	NA
G02D	UA	Background	09/25/2023	A6D	Total Dissolved Solids	mg/L	226	NA	NA
G02D	UA	Background	10/23/2023	A6DR	Total Dissolved Solids	mg/L	204	NA	NA
G03	UA	Compliance	03/09/2023	A6	Boron, total	mg/L	0.330	0.0552	Confirmed
G03	UA	Compliance	05/03/2023	A6R	Boron, total	mg/L	0.380	0.0552	Confirmed
G03	UA	Compliance	09/26/2023	A6D	Boron, total	mg/L	0.267	0.0552	TBD
G03	UA	Compliance	10/23/2023	A6DR	Boron, total	mg/L	0.269	0.0552	TBD
G03	UA	Compliance	03/09/2023	A6	Calcium, total	mg/L	46.5	46.7	No Exceedance
G03	UA	Compliance	05/03/2023	A6R	Calcium, total	mg/L	52.6	46.7	Determined
G03	UA	Compliance	09/26/2023	A6D	Calcium, total	mg/L	41.8	46.7	TBD
G03	UA	Compliance	10/23/2023	A6DR	Calcium, total	mg/L	42.8	46.7	TBD
G03	UA	Compliance	03/09/2023	A6	Chloride, total	mg/L	22.0	29.4	No Exceedance
G03	UA	Compliance	05/03/2023	A6R	Chloride, total	mg/L	28.0	29.4	No Exceedance
G03	UA	Compliance	09/26/2023	A6D	Chloride, total	mg/L	19.0	29.4	TBD
G03	UA	Compliance	10/23/2023	A6DR	Chloride, total	mg/L	20.0	29.4	TBD
G03	UA	Compliance	03/09/2023	A6	Fluoride, total	mg/L	0.170	0.288	No Exceedance
G03	UA	Compliance	05/03/2023	A6R	Fluoride, total	mg/L	0.200	0.288	No Exceedance
G03	UA	Compliance	09/26/2023	A6D	Fluoride, total	mg/L	0.210	0.288	TBD
G03	UA	Compliance	10/23/2023	A6DR	Fluoride, total	mg/L	0.200 J+	0.288	TBD
G03	UA	Compliance	03/09/2023	A6	pH (field)	SU	6.2	6.2/6.9	No Exceedance
G03	UA	Compliance	05/03/2023	A6R	pH (field)	SU	6.2	6.2/6.9	No Exceedance
G03	UA	Compliance	09/26/2023	A6D	pH (field)	SU	6.4	6.2/6.9	TBD
G03	UA	Compliance	10/23/2023	A6DR	pH (field)	SU	6.4	6.2/6.9	TBD
G03	UA	Compliance	03/09/2023	A6	Sulfate, total	mg/L	82.0	203	No Exceedance
G03	UA	Compliance	05/03/2023	A6R	Sulfate, total	mg/L	97.0 J-	203	No Exceedance



**TABLE 2**  
**ANALYTICAL RESULTS - APPENDIX III PARAMETERS**  
 2023 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	Background	SSI Type
G03	UA	Compliance	09/26/2023	A6D	Sulfate, total	mg/L	67.0	203	TBD
G03	UA	Compliance	10/23/2023	A6DR	Sulfate, total	mg/L	61.0	203	TBD
G03	UA	Compliance	03/09/2023	A6	Total Dissolved Solids	mg/L	300	541	No Exceedance
G03	UA	Compliance	05/03/2023	A6R	Total Dissolved Solids	mg/L	350	541	No Exceedance
G03	UA	Compliance	09/26/2023	A6D	Total Dissolved Solids	mg/L	295	541	TBD
G03	UA	Compliance	10/23/2023	A6DR	Total Dissolved Solids	mg/L	254	541	TBD
G05	UA	Compliance	03/09/2023	A6	Boron, total	mg/L	0.0541	0.0552	No Exceedance
G05	UA	Compliance	05/03/2023	A6R	Boron, total	mg/L	0.0478	0.0552	No Exceedance
G05	UA	Compliance	09/27/2023	A6D	Boron, total	mg/L	0.0436	0.0552	TBD
G05	UA	Compliance	10/24/2023	A6DR	Boron, total	mg/L	0.0485	0.0552	TBD
G05	UA	Compliance	03/09/2023	A6	Calcium, total	mg/L	52.6	46.7	Confirmed
G05	UA	Compliance	05/03/2023	A6R	Calcium, total	mg/L	54.4	46.7	Confirmed
G05	UA	Compliance	09/27/2023	A6D	Calcium, total	mg/L	52.2	46.7	TBD
G05	UA	Compliance	10/24/2023	A6DR	Calcium, total	mg/L	50.4	46.7	TBD
G05	UA	Compliance	03/09/2023	A6	Chloride, total	mg/L	22.0	29.4	No Exceedance
G05	UA	Compliance	05/03/2023	A6R	Chloride, total	mg/L	24.0	29.4	No Exceedance
G05	UA	Compliance	09/27/2023	A6D	Chloride, total	mg/L	20.0	29.4	TBD
G05	UA	Compliance	10/24/2023	A6DR	Chloride, total	mg/L	22.0	29.4	TBD
G05	UA	Compliance	03/09/2023	A6	Fluoride, total	mg/L	0.320	0.288	Confirmed
G05	UA	Compliance	05/03/2023	A6R	Fluoride, total	mg/L	0.380	0.288	Confirmed
G05	UA	Compliance	09/27/2023	A6D	Fluoride, total	mg/L	0.410	0.288	TBD
G05	UA	Compliance	10/24/2023	A6DR	Fluoride, total	mg/L	0.440	0.288	TBD
G05	UA	Compliance	03/09/2023	A6	pH (field)	SU	6.5	6.2/6.9	No Exceedance
G05	UA	Compliance	05/03/2023	A6R	pH (field)	SU	6.5	6.2/6.9	No Exceedance
G05	UA	Compliance	09/27/2023	A6D	pH (field)	SU	6.4	6.2/6.9	TBD
G05	UA	Compliance	10/24/2023	A6DR	pH (field)	SU	6.4	6.2/6.9	TBD
G05	UA	Compliance	03/09/2023	A6	Sulfate, total	mg/L	90.0	203	No Exceedance
G05	UA	Compliance	05/03/2023	A6R	Sulfate, total	mg/L	112	203	No Exceedance
G05	UA	Compliance	09/27/2023	A6D	Sulfate, total	mg/L	82.0	203	TBD
G05	UA	Compliance	10/24/2023	A6DR	Sulfate, total	mg/L	92.0	203	TBD
G05	UA	Compliance	03/09/2023	A6	Total Dissolved Solids	mg/L	360	541	No Exceedance
G05	UA	Compliance	05/03/2023	A6R	Total Dissolved Solids	mg/L	388	541	No Exceedance
G05	UA	Compliance	09/27/2023	A6D	Total Dissolved Solids	mg/L	360	541	TBD
G05	UA	Compliance	10/24/2023	A6DR	Total Dissolved Solids	mg/L	358	541	TBD
G06	UA	Compliance	03/09/2023	A6	Boron, total	mg/L	2.95	0.0552	Confirmed
G06	UA	Compliance	05/03/2023	A6R	Boron, total	mg/L	3.28	0.0552	Confirmed
G06	UA	Compliance	09/27/2023	A6D	Boron, total	mg/L	3.29	0.0552	TBD
G06	UA	Compliance	10/24/2023	A6DR	Boron, total	mg/L	3.73	0.0552	TBD
G06	UA	Compliance	03/09/2023	A6	Calcium, total	mg/L	87.6	46.7	Confirmed
G06	UA	Compliance	05/03/2023	A6R	Calcium, total	mg/L	92.5	46.7	Confirmed
G06	UA	Compliance	09/27/2023	A6D	Calcium, total	mg/L	84.9	46.7	TBD
G06	UA	Compliance	10/24/2023	A6DR	Calcium, total	mg/L	82.5	46.7	TBD
G06	UA	Compliance	03/09/2023	A6	Chloride, total	mg/L	21.0	29.4	No Exceedance
G06	UA	Compliance	05/03/2023	A6R	Chloride, total	mg/L	22.0	29.4	No Exceedance
G06	UA	Compliance	09/27/2023	A6D	Chloride, total	mg/L	21.0	29.4	TBD
G06	UA	Compliance	10/24/2023	A6DR	Chloride, total	mg/L	22.0	29.4	TBD



**TABLE 2**  
**ANALYTICAL RESULTS - APPENDIX III PARAMETERS**  
 2023 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	Background	SSI Type
G06	UA	Compliance	03/09/2023	A6	Fluoride, total	mg/L	0.220	0.288	No Exceedance
G06	UA	Compliance	05/03/2023	A6R	Fluoride, total	mg/L	0.260	0.288	No Exceedance
G06	UA	Compliance	09/27/2023	A6D	Fluoride, total	mg/L	0.270	0.288	TBD
G06	UA	Compliance	10/24/2023	A6DR	Fluoride, total	mg/L	0.290 J+	0.288	TBD
G06	UA	Compliance	03/09/2023	A6	pH (field)	SU	6.6	6.2/6.9	No Exceedance
G06	UA	Compliance	05/03/2023	A6R	pH (field)	SU	6.6	6.2/6.9	No Exceedance
G06	UA	Compliance	09/27/2023	A6D	pH (field)	SU	6.6	6.2/6.9	TBD
G06	UA	Compliance	10/24/2023	A6DR	pH (field)	SU	6.6	6.2/6.9	TBD
G06	UA	Compliance	03/09/2023	A6	Sulfate, total	mg/L	221	203	Confirmed
G06	UA	Compliance	05/03/2023	A6R	Sulfate, total	mg/L	208	203	Confirmed
G06	UA	Compliance	09/27/2023	A6D	Sulfate, total	mg/L	187	203	TBD
G06	UA	Compliance	10/24/2023	A6DR	Sulfate, total	mg/L	196	203	TBD
G06	UA	Compliance	03/09/2023	A6	Total Dissolved Solids	mg/L	502	541	No Exceedance
G06	UA	Compliance	05/03/2023	A6R	Total Dissolved Solids	mg/L	525	541	No Exceedance
G06	UA	Compliance	09/27/2023	A6D	Total Dissolved Solids	mg/L	486	541	TBD
G06	UA	Compliance	10/24/2023	A6DR	Total Dissolved Solids	mg/L	474	541	TBD
G07	UA	Compliance	03/09/2023	A6	Boron, total	mg/L	4.55	0.0552	Confirmed
G07	UA	Compliance	05/03/2023	A6R	Boron, total	mg/L	4.27	0.0552	Confirmed
G07	UA	Compliance	09/27/2023	A6D	Boron, total	mg/L	5.80	0.0552	TBD
G07	UA	Compliance	10/24/2023	A6DR	Boron, total	mg/L	5.05	0.0552	TBD
G07	UA	Compliance	03/09/2023	A6	Calcium, total	mg/L	97.4	46.7	Confirmed
G07	UA	Compliance	05/03/2023	A6R	Calcium, total	mg/L	97.3	46.7	Confirmed
G07	UA	Compliance	09/27/2023	A6D	Calcium, total	mg/L	97.1	46.7	TBD
G07	UA	Compliance	10/24/2023	A6DR	Calcium, total	mg/L	95.7	46.7	TBD
G07	UA	Compliance	03/09/2023	A6	Chloride, total	mg/L	23.0	29.4	No Exceedance
G07	UA	Compliance	05/03/2023	A6R	Chloride, total	mg/L	22.0	29.4	No Exceedance
G07	UA	Compliance	09/27/2023	A6D	Chloride, total	mg/L	21.0	29.4	TBD
G07	UA	Compliance	10/24/2023	A6DR	Chloride, total	mg/L	21.0	29.4	TBD
G07	UA	Compliance	03/09/2023	A6	Fluoride, total	mg/L	0.350	0.288	Confirmed
G07	UA	Compliance	05/03/2023	A6R	Fluoride, total	mg/L	0.400	0.288	Confirmed
G07	UA	Compliance	09/27/2023	A6D	Fluoride, total	mg/L	0.430	0.288	TBD
G07	UA	Compliance	10/24/2023	A6DR	Fluoride, total	mg/L	0.410	0.288	TBD
G07	UA	Compliance	03/09/2023	A6	pH (field)	SU	6.4	6.2/6.9	No Exceedance
G07	UA	Compliance	05/03/2023	A6R	pH (field)	SU	6.4	6.2/6.9	No Exceedance
G07	UA	Compliance	09/27/2023	A6D	pH (field)	SU	6.4	6.2/6.9	TBD
G07	UA	Compliance	10/24/2023	A6DR	pH (field)	SU	6.4	6.2/6.9	TBD
G07	UA	Compliance	03/09/2023	A6	Sulfate, total	mg/L	308	203	Confirmed
G07	UA	Compliance	05/03/2023	A6R	Sulfate, total	mg/L	260	203	Confirmed
G07	UA	Compliance	09/27/2023	A6D	Sulfate, total	mg/L	268	203	TBD
G07	UA	Compliance	10/24/2023	A6DR	Sulfate, total	mg/L	285	203	TBD
G07	UA	Compliance	03/09/2023	A6	Total Dissolved Solids	mg/L	630	541	Confirmed
G07	UA	Compliance	05/03/2023	A6R	Total Dissolved Solids	mg/L	590	541	Confirmed
G07	UA	Compliance	09/27/2023	A6D	Total Dissolved Solids	mg/L	612	541	TBD
G07	UA	Compliance	10/24/2023	A6DR	Total Dissolved Solids	mg/L	618	541	TBD
G08	UA	Compliance	03/09/2023	A6	Boron, total	mg/L	4.33	0.0552	Confirmed
G08	UA	Compliance	05/03/2023	A6R	Boron, total	mg/L	5.43	0.0552	Confirmed

**TABLE 2**  
**ANALYTICAL RESULTS - APPENDIX III PARAMETERS**  
 2023 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	Background	SSI Type
G08	UA	Compliance	09/26/2023	A6D	Boron, total	mg/L	6.30	0.0552	TBD
G08	UA	Compliance	10/24/2023	A6DR	Boron, total	mg/L	5.28	0.0552	TBD
G08	UA	Compliance	03/09/2023	A6	Calcium, total	mg/L	119	46.7	Confirmed
G08	UA	Compliance	05/03/2023	A6R	Calcium, total	mg/L	140	46.7	Confirmed
G08	UA	Compliance	09/26/2023	A6D	Calcium, total	mg/L	132	46.7	TBD
G08	UA	Compliance	10/24/2023	A6DR	Calcium, total	mg/L	140	46.7	TBD
G08	UA	Compliance	03/09/2023	A6	Chloride, total	mg/L	15.0	29.4	No Exceedance
G08	UA	Compliance	05/03/2023	A6R	Chloride, total	mg/L	16.0	29.4	No Exceedance
G08	UA	Compliance	09/26/2023	A6D	Chloride, total	mg/L	14.0	29.4	TBD
G08	UA	Compliance	10/24/2023	A6DR	Chloride, total	mg/L	17.0	29.4	TBD
G08	UA	Compliance	03/09/2023	A6	Fluoride, total	mg/L	0.230	0.288	No Exceedance
G08	UA	Compliance	05/03/2023	A6R	Fluoride, total	mg/L	0.290	0.288	Determined
G08	UA	Compliance	09/26/2023	A6D	Fluoride, total	mg/L	0.310	0.288	TBD
G08	UA	Compliance	10/24/2023	A6DR	Fluoride, total	mg/L	0.290 J+	0.288	TBD
G08	UA	Compliance	03/09/2023	A6	pH (field)	SU	6.8	6.2/6.9	No Exceedance
G08	UA	Compliance	05/03/2023	A6R	pH (field)	SU	6.9	6.2/6.9	No Exceedance
G08	UA	Compliance	09/26/2023	A6D	pH (field)	SU	7.0	6.2/6.9	TBD
G08	UA	Compliance	10/24/2023	A6DR	pH (field)	SU	7.0	6.2/6.9	TBD
G08	UA	Compliance	03/09/2023	A6	Sulfate, total	mg/L	297	203	Confirmed
G08	UA	Compliance	05/03/2023	A6R	Sulfate, total	mg/L	363	203	Confirmed
G08	UA	Compliance	09/26/2023	A6D	Sulfate, total	mg/L	320	203	TBD
G08	UA	Compliance	10/24/2023	A6DR	Sulfate, total	mg/L	389	203	TBD
G08	UA	Compliance	03/09/2023	A6	Total Dissolved Solids	mg/L	612	541	Confirmed
G08	UA	Compliance	05/03/2023	A6R	Total Dissolved Solids	mg/L	714	541	Confirmed
G08	UA	Compliance	09/26/2023	A6D	Total Dissolved Solids	mg/L	680	541	TBD
G08	UA	Compliance	10/24/2023	A6DR	Total Dissolved Solids	mg/L	660	541	TBD
G09	UA	Compliance	03/09/2023	A6	Boron, total	mg/L	3.49	0.0552	Confirmed
G09	UA	Compliance	05/03/2023	A6R	Boron, total	mg/L	3.87	0.0552	Confirmed
G09	UA	Compliance	09/26/2023	A6D	Boron, total	mg/L	4.57	0.0552	TBD
G09	UA	Compliance	10/25/2023	A6DR	Boron, total	mg/L	3.50	0.0552	TBD
G09	UA	Compliance	03/09/2023	A6	Calcium, total	mg/L	75.5	46.7	Confirmed
G09	UA	Compliance	05/03/2023	A6R	Calcium, total	mg/L	67.2	46.7	Confirmed
G09	UA	Compliance	09/26/2023	A6D	Calcium, total	mg/L	64.8	46.7	TBD
G09	UA	Compliance	10/25/2023	A6DR	Calcium, total	mg/L	62.3	46.7	TBD
G09	UA	Compliance	03/09/2023	A6	Chloride, total	mg/L	19.0	29.4	No Exceedance
G09	UA	Compliance	05/03/2023	A6R	Chloride, total	mg/L	20.0	29.4	No Exceedance
G09	UA	Compliance	09/26/2023	A6D	Chloride, total	mg/L	17.0	29.4	TBD
G09	UA	Compliance	10/25/2023	A6DR	Chloride, total	mg/L	17.0	29.4	TBD
G09	UA	Compliance	03/09/2023	A6	Fluoride, total	mg/L	0.220	0.288	No Exceedance
G09	UA	Compliance	05/03/2023	A6R	Fluoride, total	mg/L	0.340	0.288	Determined
G09	UA	Compliance	09/26/2023	A6D	Fluoride, total	mg/L	0.310	0.288	TBD
G09	UA	Compliance	10/25/2023	A6DR	Fluoride, total	mg/L	0.310 J+	0.288	TBD
G09	UA	Compliance	03/09/2023	A6	pH (field)	SU	6.1	6.2/6.9	Exceedance Not Confirmed
G09	UA	Compliance	05/03/2023	A6R	pH (field)	SU	6.4	6.2/6.9	No Exceedance
G09	UA	Compliance	09/26/2023	A6D	pH (field)	SU	6.2	6.2/6.9	TBD
G09	UA	Compliance	10/25/2023	A6DR	pH (field)	SU	6.2	6.2/6.9	TBD

**TABLE 2**  
**ANALYTICAL RESULTS - APPENDIX III PARAMETERS**  
 2023 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	Background	SSI Type
G09	UA	Compliance	03/09/2023	A6	Sulfate, total	mg/L	295	203	Confirmed
G09	UA	Compliance	05/03/2023	A6R	Sulfate, total	mg/L	241	203	Confirmed
G09	UA	Compliance	09/26/2023	A6D	Sulfate, total	mg/L	229	203	TBD
G09	UA	Compliance	10/25/2023	A6DR	Sulfate, total	mg/L	245	203	TBD
G09	UA	Compliance	03/09/2023	A6	Total Dissolved Solids	mg/L	562	541	Exceedance Not Confirmed
G09	UA	Compliance	05/03/2023	A6R	Total Dissolved Solids	mg/L	534 J	541	No Exceedance
G09	UA	Compliance	09/26/2023	A6D	Total Dissolved Solids	mg/L	500	541	TBD
G09	UA	Compliance	10/25/2023	A6DR	Total Dissolved Solids	mg/L	472	541	TBD
G10	UA	Compliance	03/08/2023	A6	Boron, total	mg/L	3.28	0.0552	Confirmed
G10	UA	Compliance	05/03/2023	A6R	Boron, total	mg/L	3.08	0.0552	Confirmed
G10	UA	Compliance	09/26/2023	A6D	Boron, total	mg/L	3.41	0.0552	TBD
G10	UA	Compliance	10/24/2023	A6DR	Boron, total	mg/L	2.35	0.0552	TBD
G10	UA	Compliance	03/08/2023	A6	Calcium, total	mg/L	116	46.7	Confirmed
G10	UA	Compliance	05/03/2023	A6R	Calcium, total	mg/L	124	46.7	Confirmed
G10	UA	Compliance	09/26/2023	A6D	Calcium, total	mg/L	120	46.7	TBD
G10	UA	Compliance	10/24/2023	A6DR	Calcium, total	mg/L	117	46.7	TBD
G10	UA	Compliance	03/08/2023	A6	Chloride, total	mg/L	30.0	29.4	Exceedance Not Confirmed
G10	UA	Compliance	05/03/2023	A6R	Chloride, total	mg/L	27.0	29.4	No Exceedance
G10	UA	Compliance	09/26/2023	A6D	Chloride, total	mg/L	24.0	29.4	TBD
G10	UA	Compliance	10/24/2023	A6DR	Chloride, total	mg/L	26.0	29.4	TBD
G10	UA	Compliance	03/08/2023	A6	Fluoride, total	mg/L	0.300	0.288	Confirmed
G10	UA	Compliance	05/03/2023	A6R	Fluoride, total	mg/L	0.300	0.288	Confirmed
G10	UA	Compliance	09/26/2023	A6D	Fluoride, total	mg/L	0.370	0.288	TBD
G10	UA	Compliance	10/24/2023	A6DR	Fluoride, total	mg/L	0.350 J+	0.288	TBD
G10	UA	Compliance	03/08/2023	A6	pH (field)	SU	6.6	6.2/6.9	No Exceedance
G10	UA	Compliance	05/03/2023	A6R	pH (field)	SU	6.6	6.2/6.9	No Exceedance
G10	UA	Compliance	09/26/2023	A6D	pH (field)	SU	6.7	6.2/6.9	TBD
G10	UA	Compliance	10/24/2023	A6DR	pH (field)	SU	6.6	6.2/6.9	TBD
G10	UA	Compliance	03/08/2023	A6	Sulfate, total	mg/L	425	203	Confirmed
G10	UA	Compliance	05/03/2023	A6R	Sulfate, total	mg/L	365	203	Confirmed
G10	UA	Compliance	09/26/2023	A6D	Sulfate, total	mg/L	356	203	TBD
G10	UA	Compliance	10/24/2023	A6DR	Sulfate, total	mg/L	375	203	TBD
G10	UA	Compliance	03/08/2023	A6	Total Dissolved Solids	mg/L	795	541	Confirmed
G10	UA	Compliance	05/03/2023	A6R	Total Dissolved Solids	mg/L	760	541	Confirmed
G10	UA	Compliance	09/26/2023	A6D	Total Dissolved Solids	mg/L	705	541	TBD
G10	UA	Compliance	10/24/2023	A6DR	Total Dissolved Solids	mg/L	800	541	TBD
G11	UA	Compliance	03/08/2023	A6	Boron, total	mg/L	0.327	0.0552	Confirmed
G11	UA	Compliance	05/03/2023	A6R	Boron, total	mg/L	0.373	0.0552	Confirmed
G11	UA	Compliance	09/26/2023	A6D	Boron, total	mg/L	0.308	0.0552	TBD
G11	UA	Compliance	10/24/2023	A6DR	Boron, total	mg/L	0.282	0.0552	TBD
G11	UA	Compliance	03/08/2023	A6	Calcium, total	mg/L	75.6	46.7	Confirmed
G11	UA	Compliance	05/03/2023	A6R	Calcium, total	mg/L	122	46.7	Confirmed
G11	UA	Compliance	09/26/2023	A6D	Calcium, total	mg/L	59.9	46.7	TBD
G11	UA	Compliance	10/24/2023	A6DR	Calcium, total	mg/L	54.4	46.7	TBD
G11	UA	Compliance	03/08/2023	A6	Chloride, total	mg/L	36.0	29.4	Confirmed

**TABLE 2**  
**ANALYTICAL RESULTS - APPENDIX III PARAMETERS**  
 2023 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	Background	SSI Type
G11	UA	Compliance	05/03/2023	A6R	Chloride, total	mg/L	37.0	29.4	Confirmed
G11	UA	Compliance	09/26/2023	A6D	Chloride, total	mg/L	29.0	29.4	TBD
G11	UA	Compliance	10/24/2023	A6DR	Chloride, total	mg/L	30.0	29.4	TBD
G11	UA	Compliance	03/08/2023	A6	Fluoride, total	mg/L	0.160	0.288	No Exceedance
G11	UA	Compliance	05/03/2023	A6R	Fluoride, total	mg/L	0.200	0.288	No Exceedance
G11	UA	Compliance	09/26/2023	A6D	Fluoride, total	mg/L	0.160	0.288	TBD
G11	UA	Compliance	10/24/2023	A6DR	Fluoride, total	mg/L	0.140 J+	0.288	TBD
G11	UA	Compliance	03/08/2023	A6	pH (field)	SU	5.9	6.2/6.9	Confirmed
G11	UA	Compliance	05/03/2023	A6R	pH (field)	SU	5.8	6.2/6.9	Confirmed
G11	UA	Compliance	09/26/2023	A6D	pH (field)	SU	6.0	6.2/6.9	TBD
G11	UA	Compliance	10/24/2023	A6DR	pH (field)	SU	5.9	6.2/6.9	TBD
G11	UA	Compliance	03/08/2023	A6	Sulfate, total	mg/L	303	203	Confirmed
G11	UA	Compliance	05/03/2023	A6R	Sulfate, total	mg/L	416	203	Confirmed
G11	UA	Compliance	09/26/2023	A6D	Sulfate, total	mg/L	192	203	TBD
G11	UA	Compliance	10/24/2023	A6DR	Sulfate, total	mg/L	180	203	TBD
G11	UA	Compliance	03/08/2023	A6	Total Dissolved Solids	mg/L	570	541	Confirmed
G11	UA	Compliance	05/03/2023	A6R	Total Dissolved Solids	mg/L	808	541	Confirmed
G11	UA	Compliance	09/26/2023	A6D	Total Dissolved Solids	mg/L	428	541	TBD
G11	UA	Compliance	10/24/2023	A6DR	Total Dissolved Solids	mg/L	402	541	TBD
G51D	UA	Compliance	03/08/2023	A6	Boron, total	mg/L	0.963	0.0552	Exceedance Not Confirmed
G51D	UA	Compliance	05/03/2023	A6R	Boron, total	mg/L	0.0297	0.0552	No Exceedance
G51D	UA	Compliance	09/25/2023	A6D	Boron, total	mg/L	0.899 J-	0.0552	TBD
G51D	UA	Compliance	10/25/2023	A6DR	Boron, total	mg/L	0.603	0.0552	TBD
G51D	UA	Compliance	03/08/2023	A6	Calcium, total	mg/L	29.7	46.7	No Exceedance
G51D	UA	Compliance	05/03/2023	A6R	Calcium, total	mg/L	48.2	46.7	Determined
G51D	UA	Compliance	09/25/2023	A6D	Calcium, total	mg/L	28.7	46.7	TBD
G51D	UA	Compliance	10/25/2023	A6DR	Calcium, total	mg/L	31.5	46.7	TBD
G51D	UA	Compliance	03/08/2023	A6	Chloride, total	mg/L	5.00	29.4	No Exceedance
G51D	UA	Compliance	05/03/2023	A6R	Chloride, total	mg/L	11.0	29.4	No Exceedance
G51D	UA	Compliance	09/25/2023	A6D	Chloride, total	mg/L	4.00 J	29.4	TBD
G51D	UA	Compliance	10/25/2023	A6DR	Chloride, total	mg/L	4.00	29.4	TBD
G51D	UA	Compliance	03/08/2023	A6	Fluoride, total	mg/L	0.07 J	0.288	No Exceedance
G51D	UA	Compliance	05/03/2023	A6R	Fluoride, total	mg/L	0.270	0.288	No Exceedance
G51D	UA	Compliance	09/25/2023	A6D	Fluoride, total	mg/L	0.08 J	0.288	TBD
G51D	UA	Compliance	10/25/2023	A6DR	Fluoride, total	mg/L	0.100 J+	0.288	TBD
G51D	UA	Compliance	03/08/2023	A6	pH (field)	SU	5.5	6.2/6.9	Confirmed
G51D	UA	Compliance	05/03/2023	A6R	pH (field)	SU	5.6	6.2/6.9	Confirmed
G51D	UA	Compliance	09/25/2023	A6D	pH (field)	SU	5.4	6.2/6.9	TBD
G51D	UA	Compliance	10/25/2023	A6DR	pH (field)	SU	5.3	6.2/6.9	TBD
G51D	UA	Compliance	03/08/2023	A6	Sulfate, total	mg/L	131	203	No Exceedance
G51D	UA	Compliance	05/03/2023	A6R	Sulfate, total	mg/L	59.0	203	No Exceedance
G51D	UA	Compliance	09/25/2023	A6D	Sulfate, total	mg/L	127 J	203	TBD
G51D	UA	Compliance	10/25/2023	A6DR	Sulfate, total	mg/L	120	203	TBD
G51D	UA	Compliance	03/08/2023	A6	Total Dissolved Solids	mg/L	296	541	No Exceedance
G51D	UA	Compliance	05/03/2023	A6R	Total Dissolved Solids	mg/L	310	541	No Exceedance
G51D	UA	Compliance	09/25/2023	A6D	Total Dissolved Solids	mg/L	292	541	TBD



**TABLE 2**  
**ANALYTICAL RESULTS - APPENDIX III PARAMETERS**  
 2023 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	Background	SSI Type
G51D	UA	Compliance	10/25/2023	A6DR	Total Dissolved Solids	mg/L	270	541	TBD
G52D	UA	Compliance	03/10/2023	A6	Boron, total	mg/L	0.0319 J	0.0552	No Exceedance
G52D	UA	Compliance	05/03/2023	A6R	Boron, total	mg/L	0.682	0.0552	Determined
G52D	UA	Compliance	09/26/2023	A6D	Boron, total	mg/L	0.03 UJ	0.0552	TBD
G52D	UA	Compliance	10/24/2023	A6DR	Boron, total	mg/L	0.021 J	0.0552	TBD
G52D	UA	Compliance	03/10/2023	A6	Calcium, total	mg/L	49.3	46.7	Exceedance Not Confirmed
G52D	UA	Compliance	05/03/2023	A6R	Calcium, total	mg/L	28.8	46.7	No Exceedance
G52D	UA	Compliance	09/26/2023	A6D	Calcium, total	mg/L	44.8	46.7	TBD
G52D	UA	Compliance	10/24/2023	A6DR	Calcium, total	mg/L	47.9	46.7	TBD
G52D	UA	Compliance	03/10/2023	A6	Chloride, total	mg/L	12.0	29.4	No Exceedance
G52D	UA	Compliance	05/03/2023	A6R	Chloride, total	mg/L	5.00	29.4	No Exceedance
G52D	UA	Compliance	09/26/2023	A6D	Chloride, total	mg/L	11.0	29.4	TBD
G52D	UA	Compliance	10/24/2023	A6DR	Chloride, total	mg/L	12.0	29.4	TBD
G52D	UA	Compliance	03/10/2023	A6	Fluoride, total	mg/L	0.220	0.288	No Exceedance
G52D	UA	Compliance	05/03/2023	A6R	Fluoride, total	mg/L	0.100 J	0.288	No Exceedance
G52D	UA	Compliance	09/26/2023	A6D	Fluoride, total	mg/L	0.280	0.288	TBD
G52D	UA	Compliance	10/24/2023	A6DR	Fluoride, total	mg/L	0.290 J+	0.288	TBD
G52D	UA	Compliance	03/10/2023	A6	pH (field)	SU	6.5	6.2/6.9	No Exceedance
G52D	UA	Compliance	05/03/2023	A6R	pH (field)	SU	6.3	6.2/6.9	No Exceedance
G52D	UA	Compliance	09/26/2023	A6D	pH (field)	SU	6.3	6.2/6.9	TBD
G52D	UA	Compliance	10/24/2023	A6DR	pH (field)	SU	6.3	6.2/6.9	TBD
G52D	UA	Compliance	03/10/2023	A6	Sulfate, total	mg/L	74.0	203	No Exceedance
G52D	UA	Compliance	05/03/2023	A6R	Sulfate, total	mg/L	129	203	No Exceedance
G52D	UA	Compliance	09/26/2023	A6D	Sulfate, total	mg/L	52.0	203	TBD
G52D	UA	Compliance	10/24/2023	A6DR	Sulfate, total	mg/L	52.0	203	TBD
G52D	UA	Compliance	03/10/2023	A6	Total Dissolved Solids	mg/L	292 J-	541	No Exceedance
G52D	UA	Compliance	05/03/2023	A6R	Total Dissolved Solids	mg/L	296	541	No Exceedance
G52D	UA	Compliance	09/26/2023	A6D	Total Dissolved Solids	mg/L	282	541	TBD
G52D	UA	Compliance	10/24/2023	A6DR	Total Dissolved Solids	mg/L	296	541	TBD
G53D	UA	Compliance	03/09/2023	A6	Boron, total	mg/L	0.370	0.0552	Confirmed
G53D	UA	Compliance	05/03/2023	A6R	Boron, total	mg/L	0.367	0.0552	Confirmed
G53D	UA	Compliance	09/27/2023	A6D	Boron, total	mg/L	0.371	0.0552	TBD
G53D	UA	Compliance	10/25/2023	A6DR	Boron, total	mg/L	0.349	0.0552	TBD
G53D	UA	Compliance	03/09/2023	A6	Calcium, total	mg/L	38.3	46.7	No Exceedance
G53D	UA	Compliance	05/03/2023	A6R	Calcium, total	mg/L	34.3	46.7	No Exceedance
G53D	UA	Compliance	09/27/2023	A6D	Calcium, total	mg/L	35.9	46.7	TBD
G53D	UA	Compliance	10/25/2023	A6DR	Calcium, total	mg/L	38.6	46.7	TBD
G53D	UA	Compliance	03/09/2023	A6	Chloride, total	mg/L	17.0	29.4	No Exceedance
G53D	UA	Compliance	05/03/2023	A6R	Chloride, total	mg/L	18.0	29.4	No Exceedance
G53D	UA	Compliance	09/27/2023	A6D	Chloride, total	mg/L	17.0	29.4	TBD
G53D	UA	Compliance	10/25/2023	A6DR	Chloride, total	mg/L	18.0	29.4	TBD
G53D	UA	Compliance	03/09/2023	A6	Fluoride, total	mg/L	0.590	0.288	Confirmed
G53D	UA	Compliance	05/03/2023	A6R	Fluoride, total	mg/L	0.710	0.288	Confirmed
G53D	UA	Compliance	09/27/2023	A6D	Fluoride, total	mg/L	0.760	0.288	TBD
G53D	UA	Compliance	10/25/2023	A6DR	Fluoride, total	mg/L	0.740	0.288	TBD
G53D	UA	Compliance	03/09/2023	A6	pH (field)	SU	6.5	6.2/6.9	No Exceedance

**TABLE 2**  
**ANALYTICAL RESULTS - APPENDIX III PARAMETERS**  
 2023 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	Background	SSI Type
G53D	UA	Compliance	05/03/2023	A6R	pH (field)	SU	6.5	6.2/6.9	No Exceedance
G53D	UA	Compliance	09/27/2023	A6D	pH (field)	SU	6.5	6.2/6.9	TBD
G53D	UA	Compliance	10/25/2023	A6DR	pH (field)	SU	6.5	6.2/6.9	TBD
G53D	UA	Compliance	03/09/2023	A6	Sulfate, total	mg/L	72.0	203	No Exceedance
G53D	UA	Compliance	05/03/2023	A6R	Sulfate, total	mg/L	68.0	203	No Exceedance
G53D	UA	Compliance	09/27/2023	A6D	Sulfate, total	mg/L	73.0	203	TBD
G53D	UA	Compliance	10/25/2023	A6DR	Sulfate, total	mg/L	69.0	203	TBD
G53D	UA	Compliance	03/09/2023	A6	Total Dissolved Solids	mg/L	346	541	No Exceedance
G53D	UA	Compliance	05/03/2023	A6R	Total Dissolved Solids	mg/L	314	541	No Exceedance
G53D	UA	Compliance	09/27/2023	A6D	Total Dissolved Solids	mg/L	330	541	TBD
G53D	UA	Compliance	10/25/2023	A6DR	Total Dissolved Solids	mg/L	312	541	TBD
G54D	UA	Compliance	03/09/2023	A6	Boron, total	mg/L	0.555	0.0552	Confirmed
G54D	UA	Compliance	05/03/2023	A6R	Boron, total	mg/L	0.555	0.0552	Confirmed
G54D	UA	Compliance	09/26/2023	A6D	Boron, total	mg/L	0.404	0.0552	TBD
G54D	UA	Compliance	10/25/2023	A6DR	Boron, total	mg/L	0.396	0.0552	TBD
G54D	UA	Compliance	03/09/2023	A6	Calcium, total	mg/L	86.9	46.7	Confirmed
G54D	UA	Compliance	05/03/2023	A6R	Calcium, total	mg/L	81.5	46.7	Confirmed
G54D	UA	Compliance	09/26/2023	A6D	Calcium, total	mg/L	81.2	46.7	TBD
G54D	UA	Compliance	10/25/2023	A6DR	Calcium, total	mg/L	87.5	46.7	TBD
G54D	UA	Compliance	03/09/2023	A6	Chloride, total	mg/L	22.0	29.4	No Exceedance
G54D	UA	Compliance	05/03/2023	A6R	Chloride, total	mg/L	22.0	29.4	No Exceedance
G54D	UA	Compliance	09/26/2023	A6D	Chloride, total	mg/L	20.0	29.4	TBD
G54D	UA	Compliance	10/25/2023	A6DR	Chloride, total	mg/L	23.0	29.4	TBD
G54D	UA	Compliance	03/09/2023	A6	Fluoride, total	mg/L	0.240	0.288	No Exceedance
G54D	UA	Compliance	05/03/2023	A6R	Fluoride, total	mg/L	0.300	0.288	Determined
G54D	UA	Compliance	09/26/2023	A6D	Fluoride, total	mg/L	0.300	0.288	TBD
G54D	UA	Compliance	10/25/2023	A6DR	Fluoride, total	mg/L	0.310 J+	0.288	TBD
G54D	UA	Compliance	03/09/2023	A6	pH (field)	SU	6.5	6.2/6.9	No Exceedance
G54D	UA	Compliance	05/03/2023	A6R	pH (field)	SU	6.8	6.2/6.9	No Exceedance
G54D	UA	Compliance	09/26/2023	A6D	pH (field)	SU	6.6	6.2/6.9	TBD
G54D	UA	Compliance	10/25/2023	A6DR	pH (field)	SU	6.6	6.2/6.9	TBD
G54D	UA	Compliance	03/09/2023	A6	Sulfate, total	mg/L	231	203	Exceedance Not Confirmed
G54D	UA	Compliance	05/03/2023	A6R	Sulfate, total	mg/L	194	203	No Exceedance
G54D	UA	Compliance	09/26/2023	A6D	Sulfate, total	mg/L	180	203	TBD
G54D	UA	Compliance	10/25/2023	A6DR	Sulfate, total	mg/L	192	203	TBD
G54D	UA	Compliance	03/09/2023	A6	Total Dissolved Solids	mg/L	562	541	Confirmed
G54D	UA	Compliance	05/03/2023	A6R	Total Dissolved Solids	mg/L	544	541	Confirmed
G54D	UA	Compliance	09/26/2023	A6D	Total Dissolved Solids	mg/L	508	541	TBD
G54D	UA	Compliance	10/25/2023	A6DR	Total Dissolved Solids	mg/L	502	541	TBD

**TABLE 2**  
**ANALYTICAL RESULTS - APPENDIX III PARAMETERS**  
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
JOPPA POWER PLANT  
EAST ASH POND  
JOPPA, IL

**Notes:**

HSU = hydrostratigraphic unit:

UA = Uppermost Aquifer

ID = identification

mg/L = milligrams per liter

NA = not applicable

R = resample

Statistically Significant Increase (SSI) Type:

TBD: To be determined in 2024.

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.

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

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

SU = Standard Units

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

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

J+ = The result is an estimated quantity, but the result may be biased high.

UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Generated 2024-01-22 15:21:44.68416 by banoffra

**TABLE 3**  
**ANALYTICAL RESULTS - APPENDIX IV PARAMETERS**  
 2023 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	01/24/2023	ADD	0.0006 J	0.00270	0.189	0.0002 U	0.0002 U	0.00850	0.00420	0.190	0.00320	0.0027 J	0.00006 U	0.001 J	--	0.0009 J	0.001 U
G01D	B	03/07/2023	A6	0.00260	0.00110	0.134	0.0002 U	0.0002 U	0.00470	0.00220	0.210	0.00170	0.0017 J	0.00006 U	0.0009 J	1.59	0.0008 J	0.001 U
G01D	B	05/02/2023	A6R	0.0009 J	0.0087 U	0.213	0.0002 J	0.0005 U	0.00500	0.00580	0.220	0.004 U	0.019 U	0.00006 U	0.0037 U	0.826	0.00150	0.001 U
G01D	B	09/25/2023	A6D	0.0004 U	0.0007 J	0.193	0.0002 U	0.0002 U	0.00380	0.0008 J	0.210	0.0008 J	0.0015 U	0.00006 U	0.0007 J	3.77	0.00160	0.001 U
G01D	B	10/23/2023	A6DR	0.0004 U	0.0004 U	0.188	0.0002 U	0.0002 U	0.00200	0.001 UJ	0.200 J+	0.0006 U	0.0015 U	0.00006 U	0.0006 U	1.09	0.00140 J+	0.001 U
G02D	B	01/24/2023	ADD	0.0004 U	0.0004 U	0.190	0.0002 U	0.0002 U	0.0007 U	0.0001 U	0.210	0.0006 U	0.0015 U	0.00006 U	0.0006 U	--	0.00110	0.001 U
G02D	B	03/08/2023	A6	0.0004 U	0.0004 U	0.171	0.0002 U	0.0002 U	0.0007 U	0.0001 U	0.200	0.0006 U	0.0015 U	0.00006 U	0.0006 U	0.389	0.00110	0.001 U
G02D	B	05/03/2023	A6R	0.0004 U	0.0087 U	0.210	0.0002 U	0.0005 U	0.0028 U	0.0001 U	0.220	0.004 U	0.019 U	0.00006 U	0.0037 U	0.475	0.00160	0.001 U
G02D	B	09/25/2023	A6D	0.0004 U	0.0004 U	0.229	0.0002 U	0.0002 U	0.001 J	0.0004 J	0.210	0.00190	0.0015 U	0.00006 U	0.0006 U	2.50	0.00120	0.001 U
G02D	B	10/23/2023	A6DR	0.0004 U	0.0004 U	0.170	0.0002 U	0.0002 U	0.0009 J	0.001 UJ	0.190 J+	0.0006 U	0.0015 U	0.00006 U	0.0006 U	1.03	0.00120 J+	0.001 U
G03	C	03/09/2023	A6	0.0004 U	0.00140	0.0637	0.0002 U	0.0002 U	0.00670	0.00330	0.170	0.00180	0.0019 J	0.00006 U	0.0006 U	0.134	0.0006 U	0.001 U
G03	C	05/03/2023	A6R	0.0004 U	0.0087 U	0.100	0.00100	0.0005 U	0.0235	0.0146	0.200	0.0058 J	0.019 U	0.00006 U	0.0037 U	0.754	0.0006 U	0.001 U
G03	C	09/26/2023	A6D	0.0004 U	0.0005 J	0.0748	0.0002 U	0.0002 U	0.00260	0.00140	0.210	0.0006 U	0.0018 J	0.00006 U	0.0006 U	2.24	0.0006 U	0.001 U
G03	C	10/23/2023	A6DR	0.0004 U	0.001 UJ	0.0652	0.0002 U	0.0002 U	0.00230	0.001 UJ	0.200 J+	0.001 UJ	0.003 UJ	0.00006 U	0.0006 U	1.23	0.0006 U	0.001 U
G05	C	03/09/2023	A6	0.0004 U	0.0007 J	0.175	0.0002 U	0.0002 U	0.0007 U	0.00740	0.320	0.0006 U	0.002 J	0.00006 U	0.00420	0.254	0.0006 U	0.001 U
G05	C	05/03/2023	A6R	0.0004 U	0.0087 U	0.212	0.0002 U	0.0005 U	0.0028 U	0.0103	0.380	0.004 U	0.019 U	0.00006 U	0.0051 J	0.550	0.0006 U	0.001 U
G05	C	09/27/2023	A6D	0.0004 U	0.00120	0.169	0.0002 U	0.0002 U	0.00230	0.00230	0.410	0.0006 U	0.00300 J	0.00006 U	0.00460	6.29	0.00110	0.001 U
G05	C	10/24/2023	A6DR	0.0004 U	0.001 UJ	0.177	0.0002 U	0.0002 U	0.0008 U	0.00200 J+	0.440	0.0006 U	0.003 UJ	0.00006 U	0.00250 J+	0.820	0.001 UJ	0.001 U
G06	C	03/09/2023	A6	0.0004 U	0.0006 J	0.0257	0.0002 U	0.0002 U	0.00750	0.0006 J	0.220	0.0007 J	0.00310	0.00006 U	0.0006 U	1.07	0.0006 U	0.001 U
G06	C	05/03/2023	A6R	0.00150	0.0087 U	0.0454	0.0003 J	0.0005 U	0.00840	0.00400	0.260	0.004 U	0.0095 U	0.0001 J	0.0037 U	0.869	0.0006 U	0.001 U
G06	C	09/27/2023	A6D	0.0004 U	0.00100 J	0.0251	0.0002 U	0.0002 U	0.00280	0.0008 J	0.270	0.0006 U	0.00350	0.00012 J	0.0006 U	3.04	0.0006 U	0.001 U
G06	C	10/24/2023	A6DR	0.0004 U	0.0004 U	0.0363 J+	0.0002 U	0.0002 U	0.00190	0.001 UJ	0.290 J+	0.001 UJ	0.00470 J+	0.00006 U	0.0006 U	1.29	0.0006 U	0.001 U
G07	C	03/09/2023	A6	0.0004 U	0.00300	0.0879	0.0005 J	0.0002 U	0.0132	0.00290	0.350	0.00290	0.00440	0.00006 U	0.0009 J	1.10	0.0006 U	0.001 U
G07	C	05/03/2023	A6R	0.0006 J	0.0087 U	0.215	0.00140	0.0005 U	0.0365	0.00780	0.400	0.006 J	0.019 U	0.00006 U	0.0037 U	1.49	0.0006 U	0.001 U
G07	C	09/27/2023	A6D	0.0004 U	0.0007 J	0.0366	0.0002 U	0.0002 U	0.00270	0.00110	0.430	0.0006 U	0.0025 J	0.00006 J	0.0007 J	2.53	0.0006 U	0.001 U
G07	C	10/24/2023	A6DR	0.0004 U	0.0004 U	0.0429	0.0002 U	0.0002 U	0.0008 U	0.001 UJ	0.410	0.0006 U	0.00310 J+	0.00006 U	0.0006 U	0.737	0.0006 U	0.001 U
G08	C	03/09/2023	A6	0.0004 U	0.00370	0.0495	0.0002 U	0.0002 U	0.00280	0.00360	0.230	0.0006 U	0.0027 J	0.00006 U	0.00170	0.0994	0.0006 U	0.001 U



**TABLE 3**  
**ANALYTICAL RESULTS - APPENDIX IV PARAMETERS**  
2023 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	05/03/2023	A6R	0.0004 U	0.0112	0.0974	0.000500	0.0005 U	0.00930	0.0113	0.290	0.004 U	0.019 U	0.00006 U	0.0037 U	1.02	0.0006 U	0.0013 J
G08	C	09/26/2023	A6D	0.0004 U	0.00860	0.0333	0.0002 U	0.0002 U	0.00200	0.00370	0.310	0.0006 U	0.0021 J	0.00006 U	0.00230	1.67	0.0006 U	0.001 U
G08	C	10/24/2023	A6DR	0.0004 U	0.0145	0.105	0.0004 J	0.0002 U	0.00650	0.00660 J+	0.290 J+	0.00320 J+	0.00320 J+	0.00006 U	0.00300 J+	5.61	0.0006 U	0.001 U
G09	C	03/09/2023	A6	0.0007 J	0.00450	0.0378	0.0006 J	0.0002 U	0.00520	0.00550	0.220	0.00150	0.00400	0.00006 U	0.0007 J	0.521	0.0006 U	0.001 U
G09	C	05/03/2023	A6R	0.00370	0.0091 J	0.0560	0.000800	0.0005 U	0.00840	0.00710	0.340	0.004 U	0.019 U	0.00006 U	0.0037 U	0.151	0.0006 U	0.001 U
G09	C	09/26/2023	A6D	0.0004 U	0.00430	0.0271	0.0003 J	0.0002 U	0.00210	0.00500	0.310	0.0006 U	0.00320	0.00006 J	0.0006 U	2.14	0.0006 U	0.001 U
G09	C	10/25/2023	A6DR	0.0004 U	0.00270 J+	0.0312 J+	0.0002 U	0.0002 U	0.00150	0.00270 J+	0.310 J+	0.0006 U	0.00340 J+	0.00006 U	0.002 UJ	1.09	0.0006 U	0.001 U
G10	C	03/08/2023	A6	0.0004 U	0.00290	0.0395	0.0004 J	0.0002 U	0.00690	0.00440	0.300	0.00160	0.00350	0.00006 U	0.0014 J	0.221	0.0006 U	0.001 U
G10	C	05/03/2023	A6R	0.0004 U	0.0087 U	0.0624	0.000700	0.0005 U	0.0158	0.00580	0.300	0.004 U	0.019 U	0.00006 U	0.0037 U	0.429	0.0006 U	0.001 U
G10	C	09/26/2023	A6D	0.0004 U	0.00370	0.0336	0.0002 U	0.0002 U	0.001 J	0.00210	0.370	0.0006 U	0.00410	0.00007 J	0.00160	1.32	0.0006 U	0.001 U
G10	C	10/24/2023	A6DR	0.0004 U	0.00260 J+	0.0385 J+	0.0002 U	0.0002 U	0.00360	0.00220 J+	0.350 J+	0.0006 U	0.00470 J+	0.00006 U	0.002 UJ	1.50	0.0006 U	0.001 U
G11	C	03/08/2023	A6	0.0004 U	0.0004 U	0.0146	0.0002 U	0.0002 U	0.0008 J	0.00100 J	0.160	0.0006 U	0.00360	0.00006 U	0.0006 U	0.168	0.00340	0.001 U
G11	C	05/03/2023	A6R	0.0004 U	0.0087 U	0.0770	0.000500	0.0005 U	0.00630	0.0185	0.200	0.004 U	0.019 U	0.00006 U	0.0037 U	0.804	0.00980	0.001 U
G11	C	09/26/2023	A6D	0.0004 U	0.0004 U	0.0231	0.0002 U	0.0002 U	0.0007 J	0.0006 J	0.160	0.00270	0.00350	0.00006 U	0.0007 J	2.44	0.00190	0.001 U
G11	C	10/24/2023	A6DR	0.0004 U	0.0004 U	0.0217 J+	0.0002 U	0.0002 U	0.0009 J	0.001 UJ	0.140 J+	0.0006 U	0.00350 J+	0.00006 U	0.0006 U	1.51	0.00150 J+	0.001 U
G51D	C	03/08/2023	A6	0.0004 U	0.0004 U	0.0417	0.0002 U	0.0002 U	0.0007 U	0.0006 J	0.07 J	0.0006 U	0.00710	0.00006 U	0.0006 U	0.180	0.00620	0.001 U
G51D	C	05/03/2023	A6R	0.0005 J	0.0087 U	0.273	0.0002 U	0.0005 U	0.0028 U	0.00930	0.270	0.004 U	0.019 U	0.00006 U	0.0037 U	1.31	0.0006 U	0.001 U
G51D	C	09/25/2023	A6D	0.0004 U	0.0004 U	0.0349	0.0002 U	0.0002 U	0.00170	0.0008 J	0.08 J	0.0006 U	0.00580	0.00006 U	0.0006 U	1.57	0.00510	0.001 U
G51D	C	10/25/2023	A6DR	0.0004 U	0.0004 U	0.0433	0.0002 U	0.0002 U	0.001 J	0.001 UJ	0.100 J+	0.0006 U	0.00530 J+	0.00006 U	0.00150 J+	0.820	0.00410 J+	0.001 U
G52D	C	03/10/2023	A6	0.0004 U	0.00170 J	0.307 J	0.0002 U	0.0002 U	0.0007 U	0.00220	0.220	0.0006 U	0.00340	0.00006 U	0.0009 J	0.598	0.0006 U	0.001 U
G52D	C	05/03/2023	A6R	0.0004 U	0.0087 U	0.0461	0.0002 U	0.0005 U	0.0028 U	0.00240	0.100 J	0.004 U	0.0019 U	0.00006 U	0.0037 U	0.169	0.00750	0.001 U
G52D	C	09/26/2023	A6D	0.0004 U	0.00150	0.250	0.0002 U	0.0002 U	0.0007 U	0.00420 J	0.280	0.0006 U	0.0023 J	0.00006 U	0.0009 J	1.70	0.0006 U	0.001 U
G52D	C	10/24/2023	A6DR	0.0004 U	0.00130 J+	0.354	0.0002 U	0.0002 U	0.0008 U	0.00340 J+	0.290 J+	0.0006 U	0.003 UJ	0.00006 U	0.0006 U	1.38	0.0006 U	0.001 U
G53D	C	03/09/2023	A6	0.0004 U	0.0005 J	0.101	0.0002 U	0.0002 U	0.001 J	0.00220	0.590	0.0006 U	0.0015 U	0.00006 U	0.0006 U	0.601	0.0006 U	0.001 U
G53D	C	05/03/2023	A6R	0.0004 U	0.0087 U	0.102	0.0002 U	0.0005 U	0.0028 U	0.00180	0.710	0.004 U	0.0019 U	0.00006 U	0.0037 U	0.252	0.0006 U	0.001 U
G53D	C	09/27/2023	A6D	0.0004 U	0.0004 U	0.0910	0.0002 U	0.0002 U	0.0007 U	0.00130	0.760	0.0006 U	0.0015 U	0.00006 U	0.0006 U	1.14	0.0006 U	0.001 U
G53D	C	10/25/2023	A6DR	0.0004 U	0.0004 U	0.107	0.0002 U	0.0002 U	0.0011 J	0.00120 J+	0.740	0.0006 U	0.0015 U	0.00006 U	0.002 UJ	0.601	0.0006 U	0.001 U

**TABLE 3**  
**ANALYTICAL RESULTS - APPENDIX IV PARAMETERS**  
 2023 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	03/09/2023	A6	0.0004 U	0.0009 J	0.0724	0.0002 U	0.0002 U	0.00150 J	0.0113	0.240	0.0006 U	0.00310	0.00008 U	0.0006 U	0.553	0.0006 U	0.001 U
G54D	C	05/03/2023	A6R	0.0004 U	0.0087 U	0.0794	0.0002 U	0.0005 U	0.0028 U	0.0106	0.300	0.004 U	0.0019 U	0.00006 U	0.0037 U	0.166	0.0006 U	0.001 U
G54D	C	09/26/2023	A6D	0.0004 U	0.0005 J	0.0739	0.0002 U	0.0002 U	0.0007 U	0.0102	0.300	0.0006 U	0.0028 J	0.00006 U	0.0006 U	1.20	0.0006 U	0.001 U
G54D	C	10/25/2023	A6DR	0.0004 U	0.00130 J+	0.121	0.0003 J	0.0002 U	0.00580	0.00880 J+	0.310 J+	0.00150 J+	0.00320 J+	0.00006 U	0.002 UJ	1.41	0.001 UJ	0.001 U

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

Generated 2024-01-14 01:14:45.900299 by banoffra

**TABLE 4**  
**STATISTICAL BACKGROUND VALUES**  
 2023 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

Generated 2024-01-14 01:43:39.911452 by banoffra

**TABLE 5**  
**GROUNDWATER PROTECTION STANDARDS**  
 2023 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

Generated 2024-01-14 01:14:51.463575 by banoffra

**TABLE 6**  
**DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS**  
 2023 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	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G03	UA	A6	Antimony, total	mg/L	03/05/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G03	UA	A6R	Antimony, total	mg/L	03/05/2021 - 05/03/2023	11	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G03	UA	A6	Arsenic, total	mg/L	03/05/2021 - 03/09/2023	10	30	CI around mean	0.000981	0.010	MCL/HBL	No Exceedance
G03	UA	A6R	Arsenic, total	mg/L	03/05/2021 - 05/03/2023	11	36	CI around geomean	0.00113	0.010	MCL/HBL	No Exceedance
G03	UA	A6	Barium, total	mg/L	03/05/2021 - 03/09/2023	10	0	CB around linear reg	0.000642	2.0	MCL/HBL	No Exceedance
G03	UA	A6R	Barium, total	mg/L	03/05/2021 - 05/03/2023	11	0	CI around mean	0.0572	2.0	MCL/HBL	No Exceedance
G03	UA	A6	Beryllium, total	mg/L	03/05/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G03	UA	A6R	Beryllium, total	mg/L	03/05/2021 - 05/03/2023	11	91	CI around median	0.001	0.004	MCL/HBL	No Exceedance
G03	UA	A6	Cadmium, total	mg/L	03/05/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G03	UA	A6R	Cadmium, total	mg/L	03/05/2021 - 05/03/2023	11	100	All ND - Last	0.002	0.005	MCL/HBL	No Exceedance
G03	UA	A6	Chromium, total	mg/L	03/05/2021 - 03/09/2023	10	10	CI around mean	0.00227	0.1	MCL/HBL	No Exceedance
G03	UA	A6R	Chromium, total	mg/L	03/05/2021 - 05/03/2023	11	9.1	CI around mean	0.00303	0.1	MCL/HBL	No Exceedance
G03	UA	A6	Cobalt, total	mg/L	03/05/2021 - 03/09/2023	10	30	CI around mean	0.00133	0.0366	Background	No Exceedance
G03	UA	A6R	Cobalt, total	mg/L	03/05/2021 - 05/03/2023	11	27	CI around geomean	0.00141	0.0366	Background	No Exceedance
G03	UA	A6	Fluoride, total	mg/L	03/05/2021 - 03/09/2023	10	0	CI around mean	0.188	4.0	MCL/HBL	No Exceedance
G03	UA	A6R	Fluoride, total	mg/L	03/05/2021 - 05/03/2023	11	0	CI around mean	0.189	4.0	MCL/HBL	No Exceedance
G03	UA	A6	Lead, total	mg/L	03/05/2021 - 03/09/2023	10	20	CI around mean	0.00101	0.015	MCL/HBL	No Exceedance
G03	UA	A6R	Lead, total	mg/L	03/05/2021 - 05/03/2023	11	27	CI around geomean	0.00117	0.015	MCL/HBL	No Exceedance
G03	UA	A6	Lithium, total	mg/L	03/05/2021 - 03/09/2023	10	60	CI around median	0.003	0.04	MCL/HBL	No Exceedance
G03	UA	A6R	Lithium, total	mg/L	03/05/2021 - 05/03/2023	11	64	CI around median	0.003	0.04	MCL/HBL	No Exceedance
G03	UA	A6	Mercury, total	mg/L	03/05/2021 - 03/09/2023	10	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G03	UA	A6R	Mercury, total	mg/L	03/05/2021 - 05/03/2023	11	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G03	UA	A6	Molybdenum, total	mg/L	03/05/2021 - 03/09/2023	10	80	CI around median	0.0015	0.1	MCL/HBL	No Exceedance
G03	UA	A6R	Molybdenum, total	mg/L	03/05/2021 - 05/03/2023	11	82	CI around median	0.0015	0.1	MCL/HBL	No Exceedance
G03	UA	A6	Radium 226 + Radium 228, total	pCi/L	03/05/2021 - 03/09/2023	10	0	CI around mean	0.13	5	MCL/HBL	No Exceedance
G03	UA	A6R	Radium 226 + Radium 228, total	pCi/L	03/05/2021 - 05/03/2023	11	0	CI around mean	0.203	5	MCL/HBL	No Exceedance
G03	UA	A6	Selenium, total	mg/L	03/05/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance

**TABLE 6**  
**DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS**  
 2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 JOPPA POWER PLANT  
 EAST ASH POND  
 JOPPA, IL

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G03	UA	A6R	Selenium, total	mg/L	03/05/2021 - 05/03/2023	11	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G03	UA	A6	Thallium, total	mg/L	03/05/2021 - 03/09/2023	10	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G03	UA	A6R	Thallium, total	mg/L	03/05/2021 - 05/03/2023	11	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G05	UA	A6	Antimony, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G05	UA	A6R	Antimony, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G05	UA	A6	Arsenic, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance
G05	UA	A6R	Arsenic, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.01	0.010	MCL/HBL	No Exceedance
G05	UA	A6	Barium, total	mg/L	03/04/2021 - 03/09/2023	10	0	CB around linear reg	0.146	2.0	MCL/HBL	No Exceedance
G05	UA	A6R	Barium, total	mg/L	03/04/2021 - 05/03/2023	11	0	CB around linear reg	0.161	2.0	MCL/HBL	No Exceedance
G05	UA	A6	Beryllium, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G05	UA	A6R	Beryllium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.0005	0.004	MCL/HBL	No Exceedance
G05	UA	A6	Cadmium, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G05	UA	A6R	Cadmium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.002	0.005	MCL/HBL	No Exceedance
G05	UA	A6	Chromium, total	mg/L	03/04/2021 - 03/09/2023	10	80	CI around median	0.0015	0.1	MCL/HBL	No Exceedance
G05	UA	A6R	Chromium, total	mg/L	03/04/2021 - 05/03/2023	11	82	CI around median	0.0015	0.1	MCL/HBL	No Exceedance
G05	UA	A6	Cobalt, total	mg/L	03/04/2021 - 03/09/2023	10	0	CB around linear reg	0.00267	0.0366	Background	No Exceedance
G05	UA	A6R	Cobalt, total	mg/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.007	0.0366	Background	No Exceedance
G05	UA	A6	Fluoride, total	mg/L	03/04/2021 - 03/09/2023	10	0	CI around mean	0.309	4.0	MCL/HBL	No Exceedance
G05	UA	A6R	Fluoride, total	mg/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.312	4.0	MCL/HBL	No Exceedance
G05	UA	A6	Lead, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G05	UA	A6R	Lead, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.0075	0.015	MCL/HBL	No Exceedance
G05	UA	A6	Lithium, total	mg/L	03/04/2021 - 03/09/2023	10	80	CI around median	0.003	0.04	MCL/HBL	No Exceedance
G05	UA	A6R	Lithium, total	mg/L	03/04/2021 - 05/03/2023	11	82	CI around median	0.003	0.04	MCL/HBL	No Exceedance
G05	UA	A6	Mercury, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G05	UA	A6R	Mercury, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G05	UA	A6	Molybdenum, total	mg/L	03/04/2021 - 03/09/2023	10	0	CI around mean	0.0039	0.1	MCL/HBL	No Exceedance
G05	UA	A6R	Molybdenum, total	mg/L	03/04/2021 - 05/03/2023	11	9.1	CI around mean	0.00402	0.1	MCL/HBL	No Exceedance

**TABLE 6**  
**DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS**  
 2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 JOPPA POWER PLANT  
 EAST ASH POND  
 JOPPA, IL

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G05	UA	A6	Radium 226 + Radium 228, total	pCi/L	03/04/2021 - 03/09/2023	10	0	CI around mean	0.257	5	MCL/HBL	No Exceedance
G05	UA	A6R	Radium 226 + Radium 228, total	pCi/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.292	5	MCL/HBL	No Exceedance
G05	UA	A6	Selenium, total	mg/L	03/04/2021 - 03/09/2023	10	20	CB around linear reg	-0.000698	0.05	MCL/HBL	No Exceedance
G05	UA	A6R	Selenium, total	mg/L	03/04/2021 - 05/03/2023	11	27	CB around linear reg	-0.000273	0.05	MCL/HBL	No Exceedance
G05	UA	A6	Thallium, total	mg/L	03/04/2021 - 03/09/2023	10	90	CI around median	0.002	0.002	MCL/HBL	No Exceedance
G05	UA	A6R	Thallium, total	mg/L	03/04/2021 - 05/03/2023	11	91	CI around median	0.002	0.002	MCL/HBL	No Exceedance
G06	UA	A6	Antimony, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G06	UA	A6R	Antimony, total	mg/L	03/04/2021 - 05/03/2023	11	91	CI around median	0.001	0.006	MCL/HBL	No Exceedance
G06	UA	A6	Arsenic, total	mg/L	03/04/2021 - 03/09/2023	10	60	CI around median	0.001	0.010	MCL/HBL	No Exceedance
G06	UA	A6R	Arsenic, total	mg/L	03/04/2021 - 05/03/2023	11	64	CI around median	0.001	0.010	MCL/HBL	No Exceedance
G06	UA	A6	Barium, total	mg/L	03/04/2021 - 03/09/2023	10	0	CB around linear reg	0.00158	2.0	MCL/HBL	No Exceedance
G06	UA	A6R	Barium, total	mg/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.0273	2.0	MCL/HBL	No Exceedance
G06	UA	A6	Beryllium, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G06	UA	A6R	Beryllium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.0005	0.004	MCL/HBL	No Exceedance
G06	UA	A6	Cadmium, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G06	UA	A6R	Cadmium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.002	0.005	MCL/HBL	No Exceedance
G06	UA	A6	Chromium, total	mg/L	03/04/2021 - 03/09/2023	10	40	CI around mean	0.00103	0.1	MCL/HBL	No Exceedance
G06	UA	A6R	Chromium, total	mg/L	03/04/2021 - 05/03/2023	11	36	CI around mean	0.00119	0.1	MCL/HBL	No Exceedance
G06	UA	A6	Cobalt, total	mg/L	03/04/2021 - 03/09/2023	10	60	CI around median	0.001	0.0366	Background	No Exceedance
G06	UA	A6R	Cobalt, total	mg/L	03/04/2021 - 05/03/2023	11	55	CI around median	0.001	0.0366	Background	No Exceedance
G06	UA	A6	Fluoride, total	mg/L	03/04/2021 - 03/09/2023	10	0	CI around mean	0.25	4.0	MCL/HBL	No Exceedance
G06	UA	A6R	Fluoride, total	mg/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.252	4.0	MCL/HBL	No Exceedance
G06	UA	A6	Lead, total	mg/L	03/04/2021 - 03/09/2023	10	80	CI around median	0.001	0.015	MCL/HBL	No Exceedance
G06	UA	A6R	Lead, total	mg/L	03/04/2021 - 05/03/2023	11	82	CI around median	0.001	0.015	MCL/HBL	No Exceedance
G06	UA	A6	Lithium, total	mg/L	03/04/2021 - 03/09/2023	10	20	CI around median	0.0031	0.04	MCL/HBL	No Exceedance
G06	UA	A6R	Lithium, total	mg/L	03/04/2021 - 05/03/2023	11	27	CI around median	0.0031	0.04	MCL/HBL	No Exceedance
G06	UA	A6	Mercury, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance



**TABLE 6**  
**DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS**  
 2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 JOPPA POWER PLANT  
 EAST ASH POND  
 JOPPA, IL

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G06	UA	A6R	Mercury, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G06	UA	A6	Molybdenum, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G06	UA	A6R	Molybdenum, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.01	0.1	MCL/HBL	No Exceedance
G06	UA	A6	Radium 226 + Radium 228, total	pCi/L	03/04/2021 - 03/09/2023	10	0	CI around mean	0.468	5	MCL/HBL	No Exceedance
G06	UA	A6R	Radium 226 + Radium 228, total	pCi/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.512	5	MCL/HBL	No Exceedance
G06	UA	A6	Selenium, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G06	UA	A6R	Selenium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G06	UA	A6	Thallium, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G06	UA	A6R	Thallium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G07	UA	A6	Antimony, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G07	UA	A6R	Antimony, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G07	UA	A6	Arsenic, total	mg/L	03/04/2021 - 03/09/2023	10	70	CI around median	0.001	0.010	MCL/HBL	No Exceedance
G07	UA	A6R	Arsenic, total	mg/L	03/04/2021 - 05/03/2023	11	73	CI around median	0.001	0.010	MCL/HBL	No Exceedance
G07	UA	A6	Barium, total	mg/L	03/04/2021 - 03/09/2023	10	0	CI around geomean	0.0406	2.0	MCL/HBL	No Exceedance
G07	UA	A6R	Barium, total	mg/L	03/04/2021 - 05/03/2023	11	0	CI around geomean	0.0426	2.0	MCL/HBL	No Exceedance
G07	UA	A6	Beryllium, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G07	UA	A6R	Beryllium, total	mg/L	03/04/2021 - 05/03/2023	11	91	CI around median	0.001	0.004	MCL/HBL	No Exceedance
G07	UA	A6	Cadmium, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G07	UA	A6R	Cadmium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.002	0.005	MCL/HBL	No Exceedance
G07	UA	A6	Chromium, total	mg/L	03/04/2021 - 03/09/2023	10	40	CI around geomean	0.00163	0.1	MCL/HBL	No Exceedance
G07	UA	A6R	Chromium, total	mg/L	03/04/2021 - 05/03/2023	11	36	CI around geomean	0.00187	0.1	MCL/HBL	No Exceedance
G07	UA	A6	Cobalt, total	mg/L	03/04/2021 - 03/09/2023	10	0	CI around mean	0.00133	0.0366	Background	No Exceedance
G07	UA	A6R	Cobalt, total	mg/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.00142	0.0366	Background	No Exceedance
G07	UA	A6	Fluoride, total	mg/L	03/04/2021 - 03/09/2023	10	0	CI around median	0.35	4.0	MCL/HBL	No Exceedance
G07	UA	A6R	Fluoride, total	mg/L	03/04/2021 - 05/03/2023	11	0	CI around median	0.35	4.0	MCL/HBL	No Exceedance
G07	UA	A6	Lead, total	mg/L	03/04/2021 - 03/09/2023	10	70	CI around median	0.001	0.015	MCL/HBL	No Exceedance
G07	UA	A6R	Lead, total	mg/L	03/04/2021 - 05/03/2023	11	73	CI around median	0.001	0.015	MCL/HBL	No Exceedance



**TABLE 6**  
**DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS**  
 2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 JOPPA POWER PLANT  
 EAST ASH POND  
 JOPPA, IL

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G07	UA	A6	Lithium, total	mg/L	03/04/2021 - 03/09/2023	10	60	CI around median	0.003	0.04	MCL/HBL	No Exceedance
G07	UA	A6R	Lithium, total	mg/L	03/04/2021 - 05/03/2023	11	64	CI around median	0.003	0.04	MCL/HBL	No Exceedance
G07	UA	A6	Mercury, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G07	UA	A6R	Mercury, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G07	UA	A6	Molybdenum, total	mg/L	03/04/2021 - 03/09/2023	10	90	CI around median	0.0015	0.1	MCL/HBL	No Exceedance
G07	UA	A6R	Molybdenum, total	mg/L	03/04/2021 - 05/03/2023	11	91	CI around median	0.0015	0.1	MCL/HBL	No Exceedance
G07	UA	A6	Radium 226 + Radium 228, total	pCi/L	03/04/2021 - 03/09/2023	10	0	CI around mean	0.246	5	MCL/HBL	No Exceedance
G07	UA	A6R	Radium 226 + Radium 228, total	pCi/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.301	5	MCL/HBL	No Exceedance
G07	UA	A6	Selenium, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G07	UA	A6R	Selenium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G07	UA	A6	Thallium, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G07	UA	A6R	Thallium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G08	UA	A6	Antimony, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G08	UA	A6R	Antimony, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G08	UA	A6	Arsenic, total	mg/L	03/04/2021 - 03/09/2023	10	10	CI around mean	0.0054	0.010	MCL/HBL	No Exceedance
G08	UA	A6R	Arsenic, total	mg/L	03/04/2021 - 05/03/2023	11	9.1	CI around mean	0.00569	0.010	MCL/HBL	No Exceedance
G08	UA	A6	Barium, total	mg/L	03/04/2021 - 03/09/2023	10	0	CB around T-S line	-0.527	2.0	MCL/HBL	No Exceedance
G08	UA	A6R	Barium, total	mg/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.0467	2.0	MCL/HBL	No Exceedance
G08	UA	A6	Beryllium, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G08	UA	A6R	Beryllium, total	mg/L	03/04/2021 - 05/03/2023	11	91	CI around median	0.001	0.004	MCL/HBL	No Exceedance
G08	UA	A6	Cadmium, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G08	UA	A6R	Cadmium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.002	0.005	MCL/HBL	No Exceedance
G08	UA	A6	Chromium, total	mg/L	03/04/2021 - 03/09/2023	10	20	CI around mean	0.00138	0.1	MCL/HBL	No Exceedance
G08	UA	A6R	Chromium, total	mg/L	03/04/2021 - 05/03/2023	11	18	CI around geomean	0.00164	0.1	MCL/HBL	No Exceedance
G08	UA	A6	Cobalt, total	mg/L	03/04/2021 - 03/09/2023	10	10	CI around mean	0.00269	0.0366	Background	No Exceedance
G08	UA	A6R	Cobalt, total	mg/L	03/04/2021 - 05/03/2023	11	9.1	CI around mean	0.00287	0.0366	Background	No Exceedance
G08	UA	A6	Fluoride, total	mg/L	03/04/2021 - 03/09/2023	10	0	CB around linear reg	0.17	4.0	MCL/HBL	No Exceedance

**TABLE 6**  
**DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS**  
 2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 JOPPA POWER PLANT  
 EAST ASH POND  
 JOPPA, IL

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G08	UA	A6R	Fluoride, total	mg/L	03/04/2021 - 05/03/2023	11	0	CB around linear reg	0.195	4.0	MCL/HBL	No Exceedance
G08	UA	A6	Lead, total	mg/L	03/04/2021 - 03/09/2023	10	80	CI around median	0.001	0.015	MCL/HBL	No Exceedance
G08	UA	A6R	Lead, total	mg/L	03/04/2021 - 05/03/2023	11	82	CI around median	0.001	0.015	MCL/HBL	No Exceedance
G08	UA	A6	Lithium, total	mg/L	03/04/2021 - 03/09/2023	10	90	CI around median	0.003	0.04	MCL/HBL	No Exceedance
G08	UA	A6R	Lithium, total	mg/L	03/04/2021 - 05/03/2023	11	91	CI around median	0.003	0.04	MCL/HBL	No Exceedance
G08	UA	A6	Mercury, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G08	UA	A6R	Mercury, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G08	UA	A6	Molybdenum, total	mg/L	03/04/2021 - 03/09/2023	10	10	CI around median	0.0017	0.1	MCL/HBL	No Exceedance
G08	UA	A6R	Molybdenum, total	mg/L	03/04/2021 - 05/03/2023	11	18	CI around median	0.0017	0.1	MCL/HBL	No Exceedance
G08	UA	A6	Radium 226 + Radium 228, total	pCi/L	03/04/2021 - 03/09/2023	10	0	CI around mean	0.245	5	MCL/HBL	No Exceedance
G08	UA	A6R	Radium 226 + Radium 228, total	pCi/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.315	5	MCL/HBL	No Exceedance
G08	UA	A6	Selenium, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G08	UA	A6R	Selenium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G08	UA	A6	Thallium, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G08	UA	A6R	Thallium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G09	UA	A6	Antimony, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G09	UA	A6R	Antimony, total	mg/L	03/04/2021 - 05/03/2023	11	91	CI around median	0.001	0.006	MCL/HBL	No Exceedance
G09	UA	A6	Arsenic, total	mg/L	03/04/2021 - 03/09/2023	10	10	CI around mean	0.00185	0.010	MCL/HBL	No Exceedance
G09	UA	A6R	Arsenic, total	mg/L	03/04/2021 - 05/03/2023	11	18	CI around mean	0.00215	0.010	MCL/HBL	No Exceedance
G09	UA	A6	Barium, total	mg/L	03/04/2021 - 03/09/2023	10	0	CI around mean	0.0347	2.0	MCL/HBL	No Exceedance
G09	UA	A6R	Barium, total	mg/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.0371	2.0	MCL/HBL	No Exceedance
G09	UA	A6	Beryllium, total	mg/L	03/04/2021 - 03/09/2023	10	80	CI around median	0.001	0.004	MCL/HBL	No Exceedance
G09	UA	A6R	Beryllium, total	mg/L	03/04/2021 - 05/03/2023	11	73	CI around median	0.001	0.004	MCL/HBL	No Exceedance
G09	UA	A6	Cadmium, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G09	UA	A6R	Cadmium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.002	0.005	MCL/HBL	No Exceedance
G09	UA	A6	Chromium, total	mg/L	03/04/2021 - 03/09/2023	10	30	CI around mean	0.00114	0.1	MCL/HBL	No Exceedance
G09	UA	A6R	Chromium, total	mg/L	03/04/2021 - 05/03/2023	11	27	CI around mean	0.00177	0.1	MCL/HBL	No Exceedance

**TABLE 6**  
**DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS**  
 2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 JOPPA POWER PLANT  
 EAST ASH POND  
 JOPPA, IL

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G09	UA	A6	Cobalt, total	mg/L	03/04/2021 - 03/09/2023	10	0	CB around linear reg	-0.0053	0.0366	Background	No Exceedance
G09	UA	A6R	Cobalt, total	mg/L	03/04/2021 - 05/03/2023	11	0	CB around linear reg	-0.00203	0.0366	Background	No Exceedance
G09	UA	A6	Fluoride, total	mg/L	03/04/2021 - 03/09/2023	10	0	CI around mean	0.269	4.0	MCL/HBL	No Exceedance
G09	UA	A6R	Fluoride, total	mg/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.275	4.0	MCL/HBL	No Exceedance
G09	UA	A6	Lead, total	mg/L	03/04/2021 - 03/09/2023	10	60	CI around median	0.001	0.015	MCL/HBL	No Exceedance
G09	UA	A6R	Lead, total	mg/L	03/04/2021 - 05/03/2023	11	64	CI around median	0.001	0.015	MCL/HBL	No Exceedance
G09	UA	A6	Lithium, total	mg/L	03/04/2021 - 03/09/2023	10	10	CI around median	0.0034	0.04	MCL/HBL	No Exceedance
G09	UA	A6R	Lithium, total	mg/L	03/04/2021 - 05/03/2023	11	18	CI around median	0.0034	0.04	MCL/HBL	No Exceedance
G09	UA	A6	Mercury, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G09	UA	A6R	Mercury, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G09	UA	A6	Molybdenum, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G09	UA	A6R	Molybdenum, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.01	0.1	MCL/HBL	No Exceedance
G09	UA	A6	Radium 226 + Radium 228, total	pCi/L	03/04/2021 - 03/09/2023	10	0	CI around mean	0.191	5	MCL/HBL	No Exceedance
G09	UA	A6R	Radium 226 + Radium 228, total	pCi/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.18	5	MCL/HBL	No Exceedance
G09	UA	A6	Selenium, total	mg/L	03/04/2021 - 03/09/2023	10	90	CI around median	0.001	0.05	MCL/HBL	No Exceedance
G09	UA	A6R	Selenium, total	mg/L	03/04/2021 - 05/03/2023	11	91	CI around median	0.001	0.05	MCL/HBL	No Exceedance
G09	UA	A6	Thallium, total	mg/L	03/04/2021 - 03/09/2023	10	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G09	UA	A6R	Thallium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G10	UA	A6	Antimony, total	mg/L	03/04/2021 - 03/08/2023	10	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G10	UA	A6R	Antimony, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G10	UA	A6	Arsenic, total	mg/L	03/04/2021 - 03/08/2023	10	30	CI around mean	0.000997	0.010	MCL/HBL	No Exceedance
G10	UA	A6R	Arsenic, total	mg/L	03/04/2021 - 05/03/2023	11	36	CI around median	0.001	0.010	MCL/HBL	No Exceedance
G10	UA	A6	Barium, total	mg/L	03/04/2021 - 03/08/2023	10	0	CI around mean	0.039	2.0	MCL/HBL	No Exceedance
G10	UA	A6R	Barium, total	mg/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.0401	2.0	MCL/HBL	No Exceedance
G10	UA	A6	Beryllium, total	mg/L	03/04/2021 - 03/08/2023	10	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G10	UA	A6R	Beryllium, total	mg/L	03/04/2021 - 05/03/2023	11	91	CI around median	0.001	0.004	MCL/HBL	No Exceedance
G10	UA	A6	Cadmium, total	mg/L	03/04/2021 - 03/08/2023	10	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance

**TABLE 6**  
**DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS**  
 2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 JOPPA POWER PLANT  
 EAST ASH POND  
 JOPPA, IL

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G10	UA	A6R	Cadmium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.002	0.005	MCL/HBL	No Exceedance
G10	UA	A6	Chromium, total	mg/L	03/04/2021 - 03/08/2023	10	30	CI around mean	0.0013	0.1	MCL/HBL	No Exceedance
G10	UA	A6R	Chromium, total	mg/L	03/04/2021 - 05/03/2023	11	27	CI around mean	0.00138	0.1	MCL/HBL	No Exceedance
G10	UA	A6	Cobalt, total	mg/L	03/04/2021 - 03/08/2023	10	0	CB around linear reg	-0.00402	0.0366	Background	No Exceedance
G10	UA	A6R	Cobalt, total	mg/L	03/04/2021 - 05/03/2023	11	0	CB around linear reg	-0.00146	0.0366	Background	No Exceedance
G10	UA	A6	Fluoride, total	mg/L	03/04/2021 - 03/08/2023	10	0	CI around mean	0.273	4.0	MCL/HBL	No Exceedance
G10	UA	A6R	Fluoride, total	mg/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.275	4.0	MCL/HBL	No Exceedance
G10	UA	A6	Lead, total	mg/L	03/04/2021 - 03/08/2023	10	80	CI around median	0.001	0.015	MCL/HBL	No Exceedance
G10	UA	A6R	Lead, total	mg/L	03/04/2021 - 05/03/2023	11	82	CI around median	0.001	0.015	MCL/HBL	No Exceedance
G10	UA	A6	Lithium, total	mg/L	03/04/2021 - 03/08/2023	10	40	CI around median	0.003	0.04	MCL/HBL	No Exceedance
G10	UA	A6R	Lithium, total	mg/L	03/04/2021 - 05/03/2023	11	45	CI around median	0.003	0.04	MCL/HBL	No Exceedance
G10	UA	A6	Mercury, total	mg/L	03/04/2021 - 03/08/2023	10	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G10	UA	A6R	Mercury, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G10	UA	A6	Molybdenum, total	mg/L	03/04/2021 - 03/08/2023	10	60	CI around median	0.0015	0.1	MCL/HBL	No Exceedance
G10	UA	A6R	Molybdenum, total	mg/L	03/04/2021 - 05/03/2023	11	64	CI around median	0.0015	0.1	MCL/HBL	No Exceedance
G10	UA	A6	Radium 226 + Radium 228, total	pCi/L	03/04/2021 - 03/08/2023	10	0	CI around mean	0.447	5	MCL/HBL	No Exceedance
G10	UA	A6R	Radium 226 + Radium 228, total	pCi/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.439	5	MCL/HBL	No Exceedance
G10	UA	A6	Selenium, total	mg/L	03/04/2021 - 03/08/2023	10	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G10	UA	A6R	Selenium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G10	UA	A6	Thallium, total	mg/L	03/04/2021 - 03/08/2023	10	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G10	UA	A6R	Thallium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G11	UA	A6	Antimony, total	mg/L	03/04/2021 - 03/08/2023	10	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G11	UA	A6R	Antimony, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G11	UA	A6	Arsenic, total	mg/L	03/04/2021 - 03/08/2023	10	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance
G11	UA	A6R	Arsenic, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.01	0.010	MCL/HBL	No Exceedance
G11	UA	A6	Barium, total	mg/L	03/04/2021 - 03/08/2023	10	0	CB around linear reg	-0.00239	2.0	MCL/HBL	No Exceedance
G11	UA	A6R	Barium, total	mg/L	03/04/2021 - 05/03/2023	11	0	CI around geomean	0.0122	2.0	MCL/HBL	No Exceedance

**TABLE 6**  
**DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS**  
 2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 JOPPA POWER PLANT  
 EAST ASH POND  
 JOPPA, IL

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G11	UA	A6	Beryllium, total	mg/L	03/04/2021 - 03/08/2023	10	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G11	UA	A6R	Beryllium, total	mg/L	03/04/2021 - 05/03/2023	11	91	CI around median	0.001	0.004	MCL/HBL	No Exceedance
G11	UA	A6	Cadmium, total	mg/L	03/04/2021 - 03/08/2023	10	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G11	UA	A6R	Cadmium, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.002	0.005	MCL/HBL	No Exceedance
G11	UA	A6	Chromium, total	mg/L	03/04/2021 - 03/08/2023	10	90	CI around median	0.0015	0.1	MCL/HBL	No Exceedance
G11	UA	A6R	Chromium, total	mg/L	03/04/2021 - 05/03/2023	11	82	CI around median	0.0015	0.1	MCL/HBL	No Exceedance
G11	UA	A6	Cobalt, total	mg/L	03/04/2021 - 03/08/2023	10	30	CB around linear reg	-0.00515	0.0366	Background	No Exceedance
G11	UA	A6R	Cobalt, total	mg/L	03/04/2021 - 05/03/2023	11	27	CI around geomean	0.000965	0.0366	Background	No Exceedance
G11	UA	A6	Fluoride, total	mg/L	03/04/2021 - 03/08/2023	10	0	CI around mean	0.172	4.0	MCL/HBL	No Exceedance
G11	UA	A6R	Fluoride, total	mg/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.174	4.0	MCL/HBL	No Exceedance
G11	UA	A6	Lead, total	mg/L	03/04/2021 - 03/08/2023	10	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G11	UA	A6R	Lead, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.0075	0.015	MCL/HBL	No Exceedance
G11	UA	A6	Lithium, total	mg/L	03/04/2021 - 03/08/2023	10	10	CI around geomean	0.00377	0.04	MCL/HBL	No Exceedance
G11	UA	A6R	Lithium, total	mg/L	03/04/2021 - 05/03/2023	11	18	CI around median	0.0036	0.04	MCL/HBL	No Exceedance
G11	UA	A6	Mercury, total	mg/L	03/04/2021 - 03/08/2023	10	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G11	UA	A6R	Mercury, total	mg/L	03/04/2021 - 05/03/2023	11	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G11	UA	A6	Molybdenum, total	mg/L	03/04/2021 - 03/08/2023	10	90	CI around median	0.0015	0.1	MCL/HBL	No Exceedance
G11	UA	A6R	Molybdenum, total	mg/L	03/04/2021 - 05/03/2023	11	91	CI around median	0.0015	0.1	MCL/HBL	No Exceedance
G11	UA	A6	Radium 226 + Radium 228, total	pCi/L	03/04/2021 - 03/08/2023	10	0	CI around mean	0.16	5	MCL/HBL	No Exceedance
G11	UA	A6R	Radium 226 + Radium 228, total	pCi/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.214	5	MCL/HBL	No Exceedance
G11	UA	A6	Selenium, total	mg/L	03/04/2021 - 03/08/2023	10	0	CI around mean	0.00393	0.05	MCL/HBL	No Exceedance
G11	UA	A6R	Selenium, total	mg/L	03/04/2021 - 05/03/2023	11	0	CI around mean	0.00444	0.05	MCL/HBL	No Exceedance
G11	UA	A6	Thallium, total	mg/L	03/04/2021 - 03/08/2023	10	90	CI around median	0.002	0.002	MCL/HBL	No Exceedance
G11	UA	A6R	Thallium, total	mg/L	03/04/2021 - 05/03/2023	11	91	CI around median	0.002	0.002	MCL/HBL	No Exceedance
G51D	UA	A6	Antimony, total	mg/L	12/03/2015 - 03/08/2023	15	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G51D	UA	A6R	Antimony, total	mg/L	12/03/2015 - 05/03/2023	16	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G51D	UA	A6	Arsenic, total	mg/L	12/03/2015 - 03/08/2023	20	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance



**TABLE 6**  
**DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS**  
 2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 JOPPA POWER PLANT  
 EAST ASH POND  
 JOPPA, IL

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G51D	UA	A6R	Arsenic, total	mg/L	12/03/2015 - 05/03/2023	21	100	All ND - Last	0.01	0.010	MCL/HBL	No Exceedance
G51D	UA	A6	Barium, total	mg/L	12/03/2015 - 03/08/2023	20	0	CB around T-S line	-0.0065	2.0	MCL/HBL	No Exceedance
G51D	UA	A6R	Barium, total	mg/L	12/03/2015 - 05/03/2023	21	0	CI around median	0.0417	2.0	MCL/HBL	No Exceedance
G51D	UA	A6	Beryllium, total	mg/L	12/03/2015 - 03/08/2023	15	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G51D	UA	A6R	Beryllium, total	mg/L	12/03/2015 - 05/03/2023	16	100	All ND - Last	0.0005	0.004	MCL/HBL	No Exceedance
G51D	UA	A6	Cadmium, total	mg/L	12/03/2015 - 03/08/2023	15	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G51D	UA	A6R	Cadmium, total	mg/L	12/03/2015 - 05/03/2023	16	100	All ND - Last	0.002	0.005	MCL/HBL	No Exceedance
G51D	UA	A6	Chromium, total	mg/L	12/03/2015 - 03/08/2023	20	75	CB around T-S line	0.00123	0.1	MCL/HBL	No Exceedance
G51D	UA	A6R	Chromium, total	mg/L	12/03/2015 - 05/03/2023	21	76	CB around T-S line	0.00144	0.1	MCL/HBL	No Exceedance
G51D	UA	A6	Cobalt, total	mg/L	12/03/2015 - 03/08/2023	20	10	CB around linear reg	-0.00776	0.0366	Background	No Exceedance
G51D	UA	A6R	Cobalt, total	mg/L	12/03/2015 - 05/03/2023	21	9.5	CB around T-S line	-0.0129	0.0366	Background	No Exceedance
G51D	UA	A6	Fluoride, total	mg/L	12/03/2015 - 03/08/2023	21	90	CI around median	0.1	4.0	MCL/HBL	No Exceedance
G51D	UA	A6R	Fluoride, total	mg/L	12/03/2015 - 05/03/2023	22	86	CI around median	0.1	4.0	MCL/HBL	No Exceedance
G51D	UA	A6	Lead, total	mg/L	12/03/2015 - 03/08/2023	20	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G51D	UA	A6R	Lead, total	mg/L	12/03/2015 - 05/03/2023	21	100	All ND - Last	0.0075	0.015	MCL/HBL	No Exceedance
G51D	UA	A6	Lithium, total	mg/L	12/03/2015 - 03/08/2023	20	0	CB around linear reg	0.00587	0.04	MCL/HBL	No Exceedance
G51D	UA	A6R	Lithium, total	mg/L	12/03/2015 - 05/03/2023	21	4.8	CB around T-S line	0.00567	0.04	MCL/HBL	No Exceedance
G51D	UA	A6	Mercury, total	mg/L	12/03/2015 - 03/08/2023	15	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G51D	UA	A6R	Mercury, total	mg/L	12/03/2015 - 05/03/2023	16	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G51D	UA	A6	Molybdenum, total	mg/L	12/03/2015 - 03/08/2023	16	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G51D	UA	A6R	Molybdenum, total	mg/L	12/03/2015 - 05/03/2023	17	100	All ND - Last	0.01	0.1	MCL/HBL	No Exceedance
G51D	UA	A6	Radium 226 + Radium 228, total	pCi/L	12/03/2015 - 03/08/2023	20	0	CI around mean	0.379	5	MCL/HBL	No Exceedance
G51D	UA	A6R	Radium 226 + Radium 228, total	pCi/L	12/03/2015 - 05/03/2023	21	0	CI around mean	0.415	5	MCL/HBL	No Exceedance
G51D	UA	A6	Selenium, total	mg/L	12/03/2015 - 03/08/2023	20	0	CB around linear reg	0.00533	0.05	MCL/HBL	No Exceedance
G51D	UA	A6R	Selenium, total	mg/L	12/03/2015 - 05/03/2023	21	4.8	CB around T-S line	0.00426	0.05	MCL/HBL	No Exceedance
G51D	UA	A6	Thallium, total	mg/L	12/03/2015 - 03/08/2023	15	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G51D	UA	A6R	Thallium, total	mg/L	12/03/2015 - 05/03/2023	16	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance

**TABLE 6**  
**DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS**  
 2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 JOPPA POWER PLANT  
 EAST ASH POND  
 JOPPA, IL

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G52D	UA	A6	Antimony, total	mg/L	12/03/2015 - 03/10/2023	14	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G52D	UA	A6R	Antimony, total	mg/L	12/03/2015 - 05/03/2023	15	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G52D	UA	A6	Arsenic, total	mg/L	12/03/2015 - 03/10/2023	19	5.3	CB around linear reg	-0.00138	0.010	MCL/HBL	No Exceedance
G52D	UA	A6R	Arsenic, total	mg/L	12/03/2015 - 05/03/2023	20	10	CI around mean	0.00205	0.010	MCL/HBL	No Exceedance
G52D	UA	A6	Barium, total	mg/L	12/03/2015 - 03/10/2023	19	0	CB around T-S line	0.112	2.0	MCL/HBL	No Exceedance
G52D	UA	A6R	Barium, total	mg/L	12/03/2015 - 05/03/2023	20	0	CB around linear reg	0.108	2.0	MCL/HBL	No Exceedance
G52D	UA	A6	Beryllium, total	mg/L	12/03/2015 - 03/10/2023	14	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G52D	UA	A6R	Beryllium, total	mg/L	12/03/2015 - 05/03/2023	15	100	All ND - Last	0.0005	0.004	MCL/HBL	No Exceedance
G52D	UA	A6	Cadmium, total	mg/L	12/03/2015 - 03/10/2023	14	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G52D	UA	A6R	Cadmium, total	mg/L	12/03/2015 - 05/03/2023	15	100	All ND - Last	0.002	0.005	MCL/HBL	No Exceedance
G52D	UA	A6	Chromium, total	mg/L	12/03/2015 - 03/10/2023	19	100	All ND - Last	0.0015	0.1	MCL/HBL	No Exceedance
G52D	UA	A6R	Chromium, total	mg/L	12/03/2015 - 05/03/2023	20	100	All ND - Last	0.005	0.1	MCL/HBL	No Exceedance
G52D	UA	A6	Cobalt, total	mg/L	12/03/2015 - 03/10/2023	19	0	CI around mean	0.00283	0.0366	Background	No Exceedance
G52D	UA	A6R	Cobalt, total	mg/L	12/03/2015 - 05/03/2023	20	0	CI around mean	0.0028	0.0366	Background	No Exceedance
G52D	UA	A6	Fluoride, total	mg/L	12/03/2015 - 03/10/2023	20	0	CI around mean	0.248	4.0	MCL/HBL	No Exceedance
G52D	UA	A6R	Fluoride, total	mg/L	12/03/2015 - 05/03/2023	21	0	CI around median	0.24	4.0	MCL/HBL	No Exceedance
G52D	UA	A6	Lead, total	mg/L	12/03/2015 - 03/10/2023	19	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G52D	UA	A6R	Lead, total	mg/L	12/03/2015 - 05/03/2023	20	100	All ND - Last	0.0075	0.015	MCL/HBL	No Exceedance
G52D	UA	A6	Lithium, total	mg/L	12/03/2015 - 03/10/2023	19	37	CI around mean	0.0025	0.04	MCL/HBL	No Exceedance
G52D	UA	A6R	Lithium, total	mg/L	12/03/2015 - 05/03/2023	20	40	CI around geomean	0.0025	0.04	MCL/HBL	No Exceedance
G52D	UA	A6	Mercury, total	mg/L	12/03/2015 - 03/10/2023	14	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G52D	UA	A6R	Mercury, total	mg/L	12/03/2015 - 05/03/2023	15	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G52D	UA	A6	Molybdenum, total	mg/L	12/03/2015 - 03/10/2023	15	73	CI around median	0.001	0.1	MCL/HBL	No Exceedance
G52D	UA	A6R	Molybdenum, total	mg/L	12/03/2015 - 05/03/2023	16	75	CI around median	0.001	0.1	MCL/HBL	No Exceedance
G52D	UA	A6	Radium 226 + Radium 228, total	pCi/L	12/03/2015 - 03/10/2023	19	0	CI around mean	0.846	5	MCL/HBL	No Exceedance
G52D	UA	A6R	Radium 226 + Radium 228, total	pCi/L	12/03/2015 - 05/03/2023	20	0	CI around mean	0.788	5	MCL/HBL	No Exceedance
G52D	UA	A6	Selenium, total	mg/L	12/03/2015 - 03/10/2023	19	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance

**TABLE 6**  
**DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS**  
 2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 JOPPA POWER PLANT  
 EAST ASH POND  
 JOPPA, IL

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G52D	UA	A6R	Selenium, total	mg/L	12/03/2015 - 05/03/2023	20	95	CI around median	0.001	0.05	MCL/HBL	No Exceedance
G52D	UA	A6	Thallium, total	mg/L	12/03/2015 - 03/10/2023	14	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G52D	UA	A6R	Thallium, total	mg/L	12/03/2015 - 05/03/2023	15	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G53D	UA	A6	Antimony, total	mg/L	12/03/2015 - 03/09/2023	15	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G53D	UA	A6R	Antimony, total	mg/L	12/03/2015 - 05/03/2023	16	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G53D	UA	A6	Arsenic, total	mg/L	12/03/2015 - 03/09/2023	20	100	All ND - Last	0.001	0.010	MCL/HBL	No Exceedance
G53D	UA	A6R	Arsenic, total	mg/L	12/03/2015 - 05/03/2023	21	100	All ND - Last	0.01	0.010	MCL/HBL	No Exceedance
G53D	UA	A6	Barium, total	mg/L	12/03/2015 - 03/09/2023	20	0	CB around linear reg	0.012	2.0	MCL/HBL	No Exceedance
G53D	UA	A6R	Barium, total	mg/L	12/03/2015 - 05/03/2023	21	0	CB around linear reg	0.0193	2.0	MCL/HBL	No Exceedance
G53D	UA	A6	Beryllium, total	mg/L	12/03/2015 - 03/09/2023	15	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G53D	UA	A6R	Beryllium, total	mg/L	12/03/2015 - 05/03/2023	16	100	All ND - Last	0.0005	0.004	MCL/HBL	No Exceedance
G53D	UA	A6	Cadmium, total	mg/L	12/03/2015 - 03/09/2023	15	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G53D	UA	A6R	Cadmium, total	mg/L	12/03/2015 - 05/03/2023	16	100	All ND - Last	0.002	0.005	MCL/HBL	No Exceedance
G53D	UA	A6	Chromium, total	mg/L	12/03/2015 - 03/09/2023	20	85	CI around median	0.001	0.1	MCL/HBL	No Exceedance
G53D	UA	A6R	Chromium, total	mg/L	12/03/2015 - 05/03/2023	21	86	CB around T-S line	0.00144	0.1	MCL/HBL	No Exceedance
G53D	UA	A6	Cobalt, total	mg/L	12/03/2015 - 03/09/2023	20	20	CI around geomean	0.00137	0.0366	Background	No Exceedance
G53D	UA	A6R	Cobalt, total	mg/L	12/03/2015 - 05/03/2023	21	19	CI around geomean	0.0014	0.0366	Background	No Exceedance
G53D	UA	A6	Fluoride, total	mg/L	12/03/2015 - 03/09/2023	21	0	CI around mean	0.633	4.0	MCL/HBL	No Exceedance
G53D	UA	A6R	Fluoride, total	mg/L	12/03/2015 - 05/03/2023	22	0	CI around mean	0.636	4.0	MCL/HBL	No Exceedance
G53D	UA	A6	Lead, total	mg/L	12/03/2015 - 03/09/2023	20	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G53D	UA	A6R	Lead, total	mg/L	12/03/2015 - 05/03/2023	21	100	All ND - Last	0.0075	0.015	MCL/HBL	No Exceedance
G53D	UA	A6	Lithium, total	mg/L	12/03/2015 - 03/09/2023	20	50	CB around linear reg	0.00278	0.04	MCL/HBL	No Exceedance
G53D	UA	A6R	Lithium, total	mg/L	12/03/2015 - 05/03/2023	21	52	CB around T-S line	0.00266	0.04	MCL/HBL	No Exceedance
G53D	UA	A6	Mercury, total	mg/L	12/03/2015 - 03/09/2023	15	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G53D	UA	A6R	Mercury, total	mg/L	12/03/2015 - 05/03/2023	16	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G53D	UA	A6	Molybdenum, total	mg/L	12/03/2015 - 03/09/2023	16	88	CB around T-S line	0.001	0.1	MCL/HBL	No Exceedance
G53D	UA	A6R	Molybdenum, total	mg/L	12/03/2015 - 05/03/2023	17	88	CB around T-S line	0.001	0.1	MCL/HBL	No Exceedance



**TABLE 6**  
**DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS**  
 2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 JOPPA POWER PLANT  
 EAST ASH POND  
 JOPPA, IL

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G53D	UA	A6	Radium 226 + Radium 228, total	pCi/L	12/03/2015 - 03/09/2023	20	0	CI around mean	0.326	5	MCL/HBL	No Exceedance
G53D	UA	A6R	Radium 226 + Radium 228, total	pCi/L	12/03/2015 - 05/03/2023	21	0	CI around geomean	0.214	5	MCL/HBL	No Exceedance
G53D	UA	A6	Selenium, total	mg/L	12/03/2015 - 03/09/2023	20	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G53D	UA	A6R	Selenium, total	mg/L	12/03/2015 - 05/03/2023	21	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G53D	UA	A6	Thallium, total	mg/L	12/03/2015 - 03/09/2023	15	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G53D	UA	A6R	Thallium, total	mg/L	12/03/2015 - 05/03/2023	16	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G54D	UA	A6	Antimony, total	mg/L	12/03/2015 - 03/09/2023	15	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G54D	UA	A6R	Antimony, total	mg/L	12/03/2015 - 05/03/2023	16	100	All ND - Last	0.001	0.006	MCL/HBL	No Exceedance
G54D	UA	A6	Arsenic, total	mg/L	12/03/2015 - 03/09/2023	20	45	CB around linear reg	4.78e-06	0.010	MCL/HBL	No Exceedance
G54D	UA	A6R	Arsenic, total	mg/L	12/03/2015 - 05/03/2023	21	48	CB around T-S line	-0.000438	0.010	MCL/HBL	No Exceedance
G54D	UA	A6	Barium, total	mg/L	12/03/2015 - 03/09/2023	20	0	CB around T-S line	0.0609	2.0	MCL/HBL	No Exceedance
G54D	UA	A6R	Barium, total	mg/L	12/03/2015 - 05/03/2023	21	0	CB around T-S line	0.0631	2.0	MCL/HBL	No Exceedance
G54D	UA	A6	Beryllium, total	mg/L	12/03/2015 - 03/09/2023	15	100	All ND - Last	0.001	0.004	MCL/HBL	No Exceedance
G54D	UA	A6R	Beryllium, total	mg/L	12/03/2015 - 05/03/2023	16	100	All ND - Last	0.0005	0.004	MCL/HBL	No Exceedance
G54D	UA	A6	Cadmium, total	mg/L	12/03/2015 - 03/09/2023	15	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
G54D	UA	A6R	Cadmium, total	mg/L	12/03/2015 - 05/03/2023	16	100	All ND - Last	0.002	0.005	MCL/HBL	No Exceedance
G54D	UA	A6	Chromium, total	mg/L	12/03/2015 - 03/09/2023	20	65	CI around median	0.0015	0.1	MCL/HBL	No Exceedance
G54D	UA	A6R	Chromium, total	mg/L	12/03/2015 - 05/03/2023	21	67	CI around median	0.0015	0.1	MCL/HBL	No Exceedance
G54D	UA	A6	Cobalt, total	mg/L	12/03/2015 - 03/09/2023	20	0	CB around linear reg	0.00242	0.0366	Background	No Exceedance
G54D	UA	A6R	Cobalt, total	mg/L	12/03/2015 - 05/03/2023	21	0	CB around linear reg	0.0031	0.0366	Background	No Exceedance
G54D	UA	A6	Fluoride, total	mg/L	12/03/2015 - 03/09/2023	21	0	CB around linear reg	0.253	4.0	MCL/HBL	No Exceedance
G54D	UA	A6R	Fluoride, total	mg/L	12/03/2015 - 05/03/2023	22	0	CB around linear reg	0.257	4.0	MCL/HBL	No Exceedance
G54D	UA	A6	Lead, total	mg/L	12/03/2015 - 03/09/2023	20	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
G54D	UA	A6R	Lead, total	mg/L	12/03/2015 - 05/03/2023	21	100	All ND - Last	0.0075	0.015	MCL/HBL	No Exceedance
G54D	UA	A6	Lithium, total	mg/L	12/03/2015 - 03/09/2023	20	10	CB around linear reg	0.00101	0.04	MCL/HBL	No Exceedance
G54D	UA	A6R	Lithium, total	mg/L	12/03/2015 - 05/03/2023	21	14	CB around linear reg	0.00109	0.04	MCL/HBL	No Exceedance
G54D	UA	A6	Mercury, total	mg/L	12/03/2015 - 03/09/2023	15	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance

**TABLE 6**  
**DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS**  
 2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 JOPPA POWER PLANT  
 EAST ASH POND  
 JOPPA, IL

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
G54D	UA	A6R	Mercury, total	mg/L	12/03/2015 - 05/03/2023	16	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
G54D	UA	A6	Molybdenum, total	mg/L	12/03/2015 - 03/09/2023	16	94	CB around T-S line	0.001	0.1	MCL/HBL	No Exceedance
G54D	UA	A6R	Molybdenum, total	mg/L	12/03/2015 - 05/03/2023	17	94	CB around T-S line	0.001	0.1	MCL/HBL	No Exceedance
G54D	UA	A6	Radium 226 + Radium 228, total	pCi/L	12/03/2015 - 03/09/2023	20	0	CI around geomean	0.523	5	MCL/HBL	No Exceedance
G54D	UA	A6R	Radium 226 + Radium 228, total	pCi/L	12/03/2015 - 05/03/2023	21	0	CI around geomean	0.474	5	MCL/HBL	No Exceedance
G54D	UA	A6	Selenium, total	mg/L	12/03/2015 - 03/09/2023	20	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G54D	UA	A6R	Selenium, total	mg/L	12/03/2015 - 05/03/2023	21	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
G54D	UA	A6	Thallium, total	mg/L	12/03/2015 - 03/09/2023	15	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
G54D	UA	A6R	Thallium, total	mg/L	12/03/2015 - 05/03/2023	16	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance

**Notes:**

Statistically Significant Level (SSL) Type:

No Exceedance: No exceedance of the GWPS and no resample was collected.

GWPS = Groundwater Protection Standard

GWPS Source:

Background = background concentration

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

HSU = hydrostratigraphic unit:

UA = Uppermost Aquifer

ID = identification

mg/L = milligrams per liter

ND = non-detect

pCi/L = picocuries per liter

R = resample

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

Statistical Calculation = method used to calculate the statistical result:

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

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

CB around linear reg = Confidence band around linear regression

CI around geomean = Confidence interval around the geometric mean

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

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

Generated 2024-01-14 01:15:03.900726 by banoffra

## FIGURES





- COMPLIANCE WELL
- BACKGROUND WELL
- STAFF GAUGE
- REGULATED UNIT (SUBJECT UNIT)
- PROPERTY BOUNDARY

0 200 400  
Feet

### MONITORING WELL LOCATION MAP

FIGURE 1

#### 2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT EAST ASH POND

JOPPA POWER PLANT  
JOPPA, ILLINOIS

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.







Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- MONITORING WELL
- STAFF GAGE, CCR UNIT
- GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD88)
- - - INFERRED GROUNDWATER ELEVATION CONTOUR
- ➔ GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- PROPERTY BOUNDARY

**NOTES**

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



**POTENTIOMETRIC SURFACE MAP  
MARCH 7 AND 10, 2023**

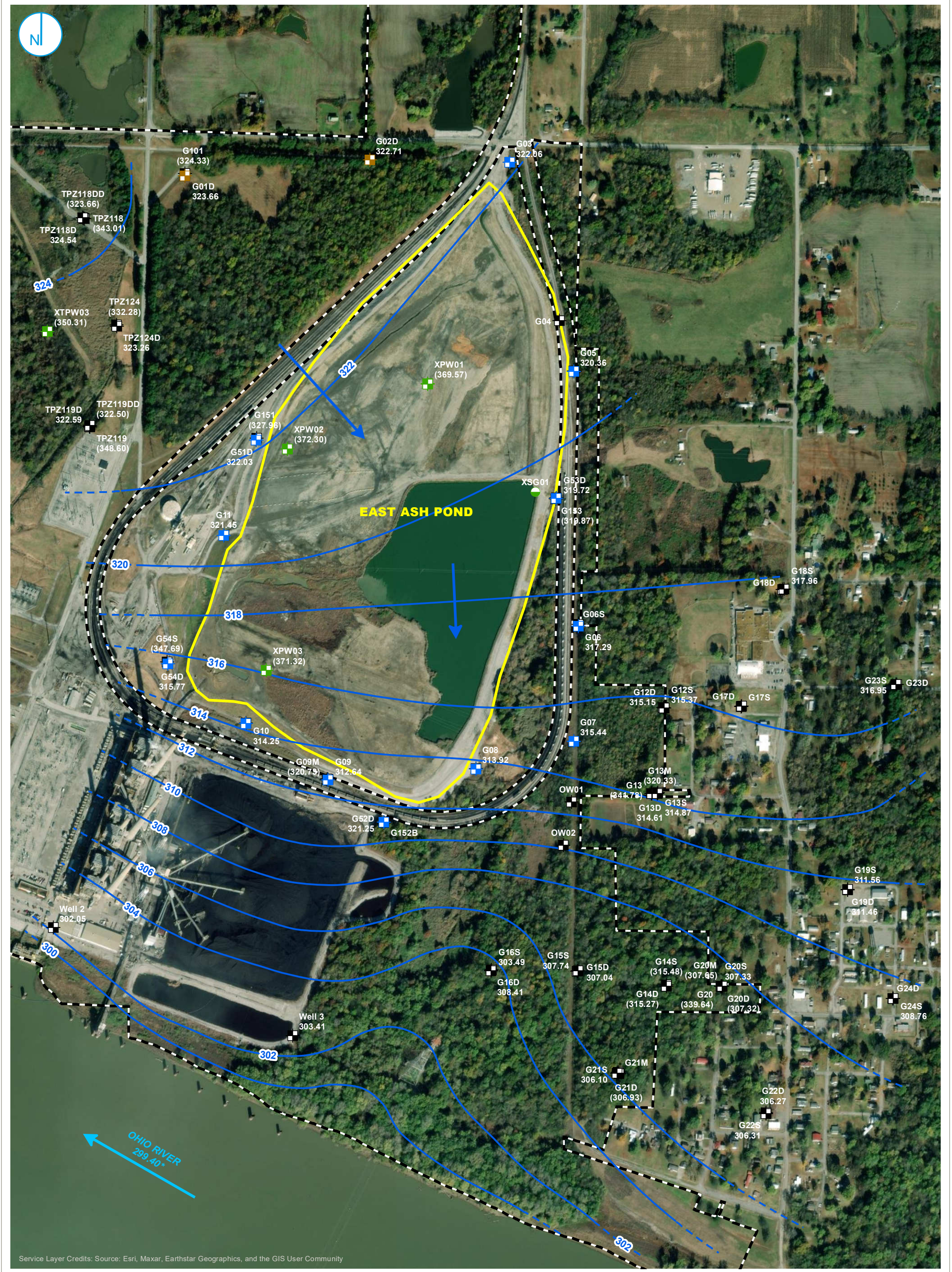
**2023 ANNUAL GROUNDWATER MONITORING  
AND CORRECTIVE ACTION REPORT  
EAST ASH POND  
JOPPA POWER PLANT  
JOPPA, ILLINOIS**

**FIGURE 2**

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.







Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- MONITORING WELL
- 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.



**POTENTIOMETRIC SURFACE MAP  
MAY 1, 2023**

**2023 ANNUAL GROUNDWATER MONITORING  
AND CORRECTIVE ACTION REPORT  
EAST ASH POND  
JOPPA POWER PLANT  
JOPPA, ILLINOIS**

**FIGURE 3**

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.







Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

- 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.



**POTENTIOMETRIC SURFACE MAP  
SEPTEMBER 25, 2023**

**2023 ANNUAL GROUNDWATER MONITORING  
AND CORRECTIVE ACTION REPORT  
EAST ASH POND  
JOPPA POWER PLANT  
JOPPA, ILLINOIS**

**FIGURE 4**

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.







Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

- 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.



**POTENTIOMETRIC SURFACE MAP  
OCTOBER 23, 2023**

**2023 ANNUAL GROUNDWATER MONITORING  
AND CORRECTIVE ACTION REPORT  
EAST ASH POND  
JOPPA POWER PLANT  
JOPPA, ILLINOIS**

**FIGURE 5**

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.





## **APPENDICES**

**APPENDIX A**  
**LABORATORY REPORTS AND FIELD DATA SHEETS**

April 10, 2023

Brian Voelker  
Vistra Energy  
1500 Eastport Plaza Drive  
Collinsville, IL 62234  
TEL: (217) 412-6605  
FAX:



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

**RE: JOP-23Q1**

**WorkOrder: 23021699**

Dear Brian Voelker:

TEKLAB, INC received 72 samples on 3/11/2023 8:00:00 AM 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](mailto:ehurley@teklabinc.com)



## Report Contents

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

**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**This reporting package includes the following:**

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Sample Summary	65
Dates Report	66
Quality Control Results	82
Receiving Check List	110
Chain of Custody	Appended



## Definitions

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

**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

### 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:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

### Qualifiers

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



## Case Narrative

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

**Client:** Vistra Energy  
**Client Project:** JOP-23Q1

**Work Order:** 23021699  
**Report Date:** 10-Apr-23

**Cooler Receipt Temp:** 2.4 °C

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

TPZ116, TPZ117, and TPZ119 could not be collected; the wells were dry.

G101\_LF and G111\_LF will be collected at a later date. XTPW07 could not be collected; the pump was stuck in the well. Another attempt will be made at a later date. JPW/EAH 3/13/23

Per Eric Bauer, report only DTW for XTPW06, XTPW07, and XTPW08. EAH 3/20/23

This report was revised on April 3, 2023 per Eric Bauer (Ramboll)'s request. The reason for the revision is to correct the Turbidity value for G113 and correct the collection time for XTPW02. XPW02 field data is not reported due to data loss/override with XTPW02 field measurements. Please replace report dated March 23, 2023 with this report. EAH 4/3/23

JOP\_257\_401 is included in this report. EAH 4/10/23

### 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:** Vistra Energy  
**Client Project:** JOP-23Q1

**Work Order:** 23021699  
**Report Date:** 10-Apr-23

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2024	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2023	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2023	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2023	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2023	Collinsville
Arkansas	ADEQ	88-0966		3/14/2024	Collinsville
Illinois	IDPH	17584		5/31/2023	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2024	Collinsville
Missouri	MDNR	00930		5/31/2023	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



## Laboratory Results

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-001

Client Sample ID: G01D

Matrix: GROUNDWATER

Collection Date: 03/07/2023 10:17

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		41.32	ft	1	03/07/2023 10:17	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		7.8	NTU	1	03/07/2023 10:17	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		195.3	mV	1	03/07/2023 10:17	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		639	µS/cm @25C	1	03/07/2023 10:17	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		14.5	°C	1	03/07/2023 10:17	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		1.80	mg/L	1	03/07/2023 10:17	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.53		1	03/07/2023 10:17	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		223	mg/L	1	03/13/2023 8:44	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 8:44	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		308	mg/L	1	03/13/2023 11:57	R325983
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		36	mg/L	1	03/15/2023 14:08	R326055
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.21	mg/L	1	03/14/2023 9:24	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		5	mg/L	1	03/15/2023 14:09	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		23.0	mg/L	1	03/14/2023 19:33	203823
Magnesium	NELAP	0.0500		7.66	mg/L	1	03/14/2023 19:33	203823
Potassium	NELAP	0.100		1.06	mg/L	1	03/14/2023 19:33	203823
Sodium	NELAP	0.0500		85.8	mg/L	1	03/14/2023 19:33	203823
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0026	mg/L	5	03/14/2023 13:54	203823
Arsenic	NELAP	0.0010		0.0011	mg/L	5	03/14/2023 13:54	203823
Barium	NELAP	0.0010		0.134	mg/L	5	03/15/2023 16:48	203823
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 13:54	203823
Boron	NELAP	0.0250		0.0290	mg/L	5	03/18/2023 1:49	203823
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 13:54	203823
Chromium	NELAP	0.0015		0.0047	mg/L	5	03/15/2023 16:48	203823
Cobalt	NELAP	0.0010		0.0022	mg/L	5	03/14/2023 13:54	203823
Lead	NELAP	0.0010		0.0017	mg/L	5	03/14/2023 13:54	203823
Lithium	*	0.0030	J	0.0017	mg/L	5	03/15/2023 16:48	203823
Molybdenum	NELAP	0.0015	J	0.0009	mg/L	5	03/14/2023 13:54	203823
Selenium	NELAP	0.0010	J	0.0008	mg/L	5	03/14/2023 13:54	203823
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/14/2023 13:54	203823



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-001

**Client Sample ID:** G01D

**Matrix:** GROUNDWATER

**Collection Date:** 03/07/2023 10:17

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 10:05	203832



Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-002

Client Sample ID: G02D

Matrix: GROUNDWATER

Collection Date: 03/08/2023 14:27

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		41.57	ft	1	03/08/2023 14:27	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		5.9	NTU	1	03/08/2023 14:27	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		49.1	mV	1	03/08/2023 14:27	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		4224	µS/cm @25C	1	03/08/2023 14:27	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		14.2	°C	1	03/08/2023 14:27	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		5.78	mg/L	1	03/08/2023 14:27	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.56		1	03/08/2023 14:27	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		141	mg/L	1	03/13/2023 11:04	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 11:04	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		218	mg/L	1	03/13/2023 13:15	R325983
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		11	mg/L	1	03/15/2023 14:17	R326055
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.20	mg/L	1	03/14/2023 9:27	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		21	mg/L	1	03/15/2023 14:17	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		37.3	mg/L	1	03/14/2023 19:37	203823
Magnesium	NELAP	0.0500		10.3	mg/L	1	03/14/2023 19:37	203823
Potassium	NELAP	0.100		1.12	mg/L	1	03/14/2023 19:37	203823
Sodium	NELAP	0.0500		28.3	mg/L	1	03/14/2023 19:37	203823
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:55	203823
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:55	203823
Barium	NELAP	0.0010		0.171	mg/L	5	03/15/2023 18:50	203823
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:55	203823
Boron	NELAP	0.0250		0.0270	mg/L	5	03/18/2023 2:03	203823
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:55	203823
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 18:50	203823
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:55	203823
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:55	203823
Lithium	*	0.0030		< 0.0030	mg/L	5	03/15/2023 18:50	203823
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	03/14/2023 15:55	203823
Selenium	NELAP	0.0010		0.0011	mg/L	5	03/14/2023 15:55	203823
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/14/2023 15:55	203823

CCV recovered outside the upper control limits for Be and TL. Sample results are below the reporting limit. Data is reportable per the TNI standard.



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-002

**Client Sample ID:** G02D

**Matrix:** GROUNDWATER

**Collection Date:** 03/08/2023 14:27

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 10:11	203832



## Laboratory Results

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-003

Client Sample ID: G03

Matrix: GROUNDWATER

Collection Date: 03/09/2023 7:18

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		36.41	ft	1	03/09/2023 7:18	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		107.3	NTU	1	03/09/2023 7:18	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		164.6	mV	1	03/09/2023 7:18	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		665	µS/cm @25C	1	03/09/2023 7:18	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		15.4	°C	1	03/09/2023 7:18	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		4.46	mg/L	1	03/09/2023 7:18	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.23		1	03/09/2023 7:18	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		139	mg/L	1	03/13/2023 11:15	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 11:15	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		300	mg/L	2.5	03/14/2023 9:39	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	20		82	mg/L	2	03/16/2023 10:17	R326131
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.17	mg/L	1	03/14/2023 11:23	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		22	mg/L	1	03/15/2023 14:41	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		46.5	mg/L	1	03/14/2023 19:48	203823
Magnesium	NELAP	0.0500		15.2	mg/L	1	03/14/2023 19:48	203823
Potassium	NELAP	0.100		1.19	mg/L	1	03/14/2023 19:48	203823
Sodium	NELAP	0.0500		35.0	mg/L	1	03/14/2023 19:48	203823
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 14:00	203823
Arsenic	NELAP	0.0010		0.0014	mg/L	5	03/14/2023 14:00	203823
Barium	NELAP	0.0010		0.0637	mg/L	5	03/15/2023 18:05	203823
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 14:00	203823
Boron	NELAP	0.0250		0.330	mg/L	5	03/18/2023 1:53	203823
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 14:00	203823
Chromium	NELAP	0.0015		0.0067	mg/L	5	03/15/2023 18:05	203823
Cobalt	NELAP	0.0010		0.0033	mg/L	5	03/14/2023 14:00	203823
Lead	NELAP	0.0010		0.0018	mg/L	5	03/14/2023 14:00	203823
Lithium	*	0.0030	J	0.0019	mg/L	5	03/15/2023 18:05	203823
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	03/14/2023 14:00	203823
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 14:00	203823
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/14/2023 14:00	203823



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-003

**Client Sample ID:** G03

**Matrix:** GROUNDWATER

**Collection Date:** 03/09/2023 7:18

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 10:14	203832





## Laboratory Results

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-004

Client Sample ID: G05

Matrix: GROUNDWATER

Collection Date: 03/09/2023 11:05

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		41.05	ft	1	03/09/2023 11:05	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		38.6	NTU	1	03/09/2023 11:05	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		47.4	mV	1	03/09/2023 11:05	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		699	µS/cm @25C	1	03/09/2023 11:05	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		13.9	°C	1	03/09/2023 11:05	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		4.95	mg/L	1	03/09/2023 11:05	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.50		1	03/09/2023 11:05	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		179	mg/L	1	03/13/2023 11:20	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 11:20	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		360	mg/L	1	03/14/2023 9:39	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	20		90	mg/L	2	03/16/2023 10:23	R326131
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.32	mg/L	1	03/14/2023 11:25	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		22	mg/L	1	03/15/2023 14:49	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		52.6	mg/L	1	03/14/2023 19:52	203823
Magnesium	NELAP	0.0500		19.4	mg/L	1	03/14/2023 19:52	203823
Potassium	NELAP	0.100		1.59	mg/L	1	03/14/2023 19:52	203823
Sodium	NELAP	0.0500		41.8	mg/L	1	03/14/2023 19:52	203823
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:17	203823
Arsenic	NELAP	0.0010	J	0.0007	mg/L	5	03/14/2023 15:17	203823
Barium	NELAP	0.0010		0.175	mg/L	5	03/15/2023 18:11	203823
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:17	203823
Boron	NELAP	0.0250		0.0541	mg/L	5	03/18/2023 1:58	203823
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:17	203823
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 18:11	203823
Cobalt	NELAP	0.0010		0.0074	mg/L	5	03/14/2023 15:17	203823
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:17	203823
Lithium	*	0.0030	J	0.0020	mg/L	5	03/15/2023 18:11	203823
Molybdenum	NELAP	0.0015		0.0042	mg/L	5	03/14/2023 15:17	203823
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:17	203823
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/14/2023 15:17	203823

CCV recovered outside the upper control limits for Be and TL. Sample results are below the reporting limit. Data is reportable per the TNI standard.



Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-004

Client Sample ID: G05

Matrix: GROUNDWATER

Collection Date: 03/09/2023 11:05

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 10:16	203832



Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-005

Client Sample ID: G06

Matrix: GROUNDWATER

Collection Date: 03/09/2023 11:56

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		36.60	ft	1	03/09/2023 11:56	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		9.7	NTU	1	03/09/2023 11:56	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		88.8	mV	1	03/09/2023 11:56	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		891	µS/cm @25C	1	03/09/2023 11:56	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		14.8	°C	1	03/09/2023 11:56	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		0.93	mg/L	1	03/09/2023 11:56	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.57		1	03/09/2023 11:56	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		161	mg/L	1	03/13/2023 11:25	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 11:25	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		502	mg/L	1	03/14/2023 9:39	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		221	mg/L	10	03/15/2023 15:02	R326055
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.22	mg/L	1	03/14/2023 11:27	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		21	mg/L	1	03/15/2023 14:57	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		87.6	mg/L	1	03/14/2023 20:10	203823
Magnesium	NELAP	0.0500		24.1	mg/L	1	03/14/2023 20:10	203823
Potassium	NELAP	0.100		2.20	mg/L	1	03/14/2023 20:10	203823
Sodium	NELAP	0.0500		42.1	mg/L	1	03/14/2023 20:10	203823
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:23	203823
Arsenic	NELAP	0.0010	J	0.0006	mg/L	5	03/14/2023 15:23	203823
Barium	NELAP	0.0010		0.0257	mg/L	5	03/15/2023 18:18	203823
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:23	203823
Boron	NELAP	0.0250		2.95	mg/L	5	03/18/2023 2:48	203823
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:23	203823
Chromium	NELAP	0.0015		0.0075	mg/L	5	03/15/2023 18:18	203823
Cobalt	NELAP	0.0010	J	0.0006	mg/L	5	03/14/2023 15:23	203823
Lead	NELAP	0.0010	J	0.0007	mg/L	5	03/14/2023 15:23	203823
Lithium	*	0.0030		0.0031	mg/L	5	03/15/2023 18:18	203823
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	03/14/2023 15:23	203823
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:23	203823
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/14/2023 15:23	203823

CCV recovered outside the upper control limits for Be and TL. Sample results are below the reporting limit. Data is reportable per the TNI standard.



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-005

**Client Sample ID:** G06

**Matrix:** GROUNDWATER

**Collection Date:** 03/09/2023 11:56

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 10:23	203832



Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-006

Client Sample ID: G07

Matrix: GROUNDWATER

Collection Date: 03/09/2023 12:28

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		36.24	ft	1	03/09/2023 12:28	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		201.3	NTU	1	03/09/2023 12:28	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		112.5	mV	1	03/09/2023 12:28	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		1077	µS/cm @25C	1	03/09/2023 12:28	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		15.0	°C	1	03/09/2023 12:28	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		0.76	mg/L	1	03/09/2023 12:28	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.42		1	03/09/2023 12:28	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		173	mg/L	1	03/13/2023 11:31	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 11:31	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		630	mg/L	2.5	03/14/2023 9:40	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		308	mg/L	10	03/15/2023 15:10	R326055
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.35	mg/L	1	03/14/2023 11:29	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		23	mg/L	1	03/15/2023 15:05	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		97.4	mg/L	1	03/14/2023 20:14	203823
Magnesium	NELAP	0.0500		24.3	mg/L	1	03/14/2023 20:14	203823
Potassium	NELAP	0.100		3.96	mg/L	1	03/14/2023 20:14	203823
Sodium	NELAP	0.0500		64.2	mg/L	1	03/14/2023 20:14	203823
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:29	203823
Arsenic	NELAP	0.0010		0.0030	mg/L	5	03/14/2023 15:29	203823
Barium	NELAP	0.0010		0.0879	mg/L	5	03/15/2023 18:24	203823
Beryllium	NELAP	0.0010	J	0.0005	mg/L	5	03/14/2023 15:29	203823
Boron	NELAP	0.0250		4.55	mg/L	5	03/18/2023 2:53	203823
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:29	203823
Chromium	NELAP	0.0015		0.0132	mg/L	5	03/15/2023 18:24	203823
Cobalt	NELAP	0.0010		0.0029	mg/L	5	03/14/2023 15:29	203823
Lead	NELAP	0.0010		0.0029	mg/L	5	03/14/2023 15:29	203823
Lithium	*	0.0030		0.0044	mg/L	5	03/15/2023 18:24	203823
Molybdenum	NELAP	0.0015	J	0.0009	mg/L	5	03/14/2023 15:29	203823
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:29	203823
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/14/2023 15:29	203823

CCV recovered outside the upper control limits for Be and TL. Sample results are below the reporting limit. Data is reportable per the TNI standard.



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-006

**Client Sample ID:** G07

**Matrix:** GROUNDWATER

**Collection Date:** 03/09/2023 12:28

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 10:25	203832



## Laboratory Results

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-007

Client Sample ID: G08

Matrix: GROUNDWATER

Collection Date: 03/09/2023 10:18

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		25.82	ft	1	03/09/2023 10:18	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		48.7	NTU	1	03/09/2023 10:18	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		-51.6	mV	1	03/09/2023 10:18	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		1047	µS/cm @25C	1	03/09/2023 10:18	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		15.4	°C	1	03/09/2023 10:18	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		0.90	mg/L	1	03/09/2023 10:18	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.85		1	03/09/2023 10:18	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		174	mg/L	1	03/13/2023 11:37	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	03/13/2023 11:37	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		612	mg/L	1	03/14/2023 9:40	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		297	mg/L	10	03/15/2023 15:18	R326055
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.23	mg/L	1	03/14/2023 11:30	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		15	mg/L	1	03/15/2023 15:13	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		119	mg/L	1	03/14/2023 20:18	203823
Magnesium	NELAP	0.0500		28.9	mg/L	1	03/14/2023 20:18	203823
Potassium	NELAP	0.100		1.47	mg/L	1	03/14/2023 20:18	203823
Sodium	NELAP	0.0500		28.5	mg/L	1	03/14/2023 20:18	203823
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:36	203823
Arsenic	NELAP	0.0010		0.0037	mg/L	5	03/14/2023 15:36	203823
Barium	NELAP	0.0010		0.0495	mg/L	5	03/15/2023 18:30	203823
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:36	203823
Boron	NELAP	0.0250		4.33	mg/L	5	03/18/2023 2:57	203823
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:36	203823
Chromium	NELAP	0.0015		0.0028	mg/L	5	03/15/2023 18:30	203823
Cobalt	NELAP	0.0010		0.0036	mg/L	5	03/14/2023 15:36	203823
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:36	203823
Lithium	*	0.0030	J	0.0027	mg/L	5	03/15/2023 18:30	203823
Molybdenum	NELAP	0.0015		0.0017	mg/L	5	03/14/2023 15:36	203823
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:36	203823
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/14/2023 15:36	203823

CCV recovered outside the upper control limits for Be and TL. Sample results are below the reporting limit. Data is reportable per the TNI standard.





**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-007

**Client Sample ID:** G08

**Matrix:** GROUNDWATER

**Collection Date:** 03/09/2023 10:18

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 10:27	203832



## Laboratory Results

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-008

Client Sample ID: G09

Matrix: GROUNDWATER

Collection Date: 03/09/2023 9:47

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		32.84	ft	1	03/09/2023 9:47	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		107.8	NTU	1	03/09/2023 9:47	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		-5	mV	1	03/09/2023 9:47	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		971	µS/cm @25C	1	03/09/2023 9:47	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		16.2	°C	1	03/09/2023 9:47	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		1.39	mg/L	1	03/09/2023 9:47	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.13		1	03/09/2023 9:47	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		116	mg/L	1	03/13/2023 11:44	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 11:44	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		562	mg/L	1	03/14/2023 9:41	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		295	mg/L	10	03/15/2023 15:42	R326055
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.22	mg/L	1	03/14/2023 11:32	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		19	mg/L	1	03/15/2023 15:37	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		75.5	mg/L	1	03/14/2023 20:21	203823
Magnesium	NELAP	0.0500		28.9	mg/L	1	03/14/2023 20:21	203823
Potassium	NELAP	0.100		1.03	mg/L	1	03/14/2023 20:21	203823
Sodium	NELAP	0.0500		53.6	mg/L	1	03/14/2023 20:21	203823
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	J	0.0007	mg/L	5	03/14/2023 15:42	203823
Arsenic	NELAP	0.0010		0.0045	mg/L	5	03/14/2023 15:42	203823
Barium	NELAP	0.0010		0.0378	mg/L	5	03/15/2023 18:37	203823
Beryllium	NELAP	0.0010	J	0.0006	mg/L	5	03/14/2023 15:42	203823
Boron	NELAP	0.0250		3.49	mg/L	5	03/18/2023 3:02	203823
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:42	203823
Chromium	NELAP	0.0015		0.0052	mg/L	5	03/15/2023 18:37	203823
Cobalt	NELAP	0.0010		0.0055	mg/L	5	03/14/2023 15:42	203823
Lead	NELAP	0.0010		0.0015	mg/L	5	03/14/2023 15:42	203823
Lithium	*	0.0030		0.0040	mg/L	5	03/15/2023 18:37	203823
Molybdenum	NELAP	0.0015	J	0.0007	mg/L	5	03/14/2023 15:42	203823
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:42	203823
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/14/2023 15:42	203823

CCV recovered outside the upper control limits for Be and TL. Sample results are below the reporting limit. Data is reportable per the TNI standard.



Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-008

Client Sample ID: G09

Matrix: GROUNDWATER

Collection Date: 03/09/2023 9:47

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 10:30	203832



## Laboratory Results

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-010

Client Sample ID: G10

Matrix: GROUNDWATER

Collection Date: 03/08/2023 17:10

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		33.78	ft	1	03/08/2023 17:10	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		51.5	NTU	1	03/08/2023 17:10	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		11.6	mV	1	03/08/2023 17:10	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		1231	µS/cm @25C	1	03/08/2023 17:10	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		15.9	°C	1	03/08/2023 17:10	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		0.79	mg/L	1	03/08/2023 17:10	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.55		1	03/08/2023 17:10	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		203	mg/L	1	03/13/2023 11:49	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	03/13/2023 11:49	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		795	mg/L	2.5	03/13/2023 13:15	R325983
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		425	mg/L	10	03/15/2023 15:50	R326055
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.30	mg/L	1	03/14/2023 9:41	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		30	mg/L	1	03/15/2023 15:45	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		116	mg/L	1	03/14/2023 20:25	203823
Magnesium	NELAP	0.0500		36.6	mg/L	1	03/14/2023 20:25	203823
Potassium	NELAP	0.100		6.00	mg/L	1	03/14/2023 20:25	203823
Sodium	NELAP	0.0500		80.4	mg/L	1	03/14/2023 20:25	203823
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:49	203823
Arsenic	NELAP	0.0010		0.0029	mg/L	5	03/14/2023 15:49	203823
Barium	NELAP	0.0010		0.0395	mg/L	5	03/15/2023 18:43	203823
Beryllium	NELAP	0.0010	J	0.0004	mg/L	5	03/14/2023 15:49	203823
Boron	NELAP	0.0250		3.28	mg/L	5	03/18/2023 3:07	203823
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:49	203823
Chromium	NELAP	0.0015		0.0069	mg/L	5	03/15/2023 18:43	203823
Cobalt	NELAP	0.0010		0.0044	mg/L	5	03/14/2023 15:49	203823
Lead	NELAP	0.0010		0.0016	mg/L	5	03/14/2023 15:49	203823
Lithium	*	0.0030		0.0035	mg/L	5	03/15/2023 18:43	203823
Molybdenum	NELAP	0.0015	J	0.0014	mg/L	5	03/14/2023 15:49	203823
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/14/2023 15:49	203823
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/14/2023 15:49	203823

CCV recovered outside the upper control limits for Be and TL. Sample results are below the reporting limit. Data is reportable per the TNI standard.



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-010

**Client Sample ID:** G10

**Matrix:** GROUNDWATER

**Collection Date:** 03/08/2023 17:10

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 10:32	203832



Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-016

Client Sample ID: G11

Matrix: GROUNDWATER

Collection Date: 03/08/2023 15:47

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		44.26	ft	1	03/08/2023 15:47	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		49.3	NTU	1	03/08/2023 15:47	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		166.3	mV	1	03/08/2023 15:47	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		902	µS/cm @25C	1	03/08/2023 15:47	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		16.0	°C	1	03/08/2023 15:47	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		1.13	mg/L	1	03/08/2023 15:47	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		5.87		1	03/08/2023 15:47	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		90	mg/L	1	03/13/2023 13:05	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 13:05	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		570	mg/L	1	03/13/2023 13:15	R325983
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		303	mg/L	10	03/15/2023 17:07	R326055
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.16	mg/L	1	03/14/2023 9:45	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		36	mg/L	1	03/15/2023 17:02	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100	S	75.6	mg/L	1	03/14/2023 14:36	203826
Magnesium	NELAP	0.0500		27.8	mg/L	1	03/14/2023 14:36	203826
Potassium	NELAP	0.100		0.952	mg/L	1	03/14/2023 14:36	203826
Sodium	NELAP	0.0500		48.7	mg/L	1	03/14/2023 14:36	203826
<i>Matrix spike control limits for are not applicable due to high sample/spike ratio.</i>								
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:05	203826
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:05	203826
Barium	NELAP	0.0010		0.0146	mg/L	5	03/15/2023 3:05	203826
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:05	203826
Boron	NELAP	0.0250		0.327	mg/L	5	03/15/2023 3:05	203826
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:05	203826
Chromium	NELAP	0.0015	J	0.0008	mg/L	5	03/15/2023 15:05	203826
Cobalt	NELAP	0.0010	J	0.0010	mg/L	5	03/15/2023 3:05	203826
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:05	203826
Lithium	*	0.0030		0.0036	mg/L	5	03/15/2023 3:05	203826
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 3:05	203826
Selenium	NELAP	0.0010		0.0034	mg/L	5	03/15/2023 3:05	203826
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/15/2023 3:05	203826



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-016

**Client Sample ID:** G11

**Matrix:** GROUNDWATER

**Collection Date:** 03/08/2023 15:47

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 11:15	203833





## Laboratory Results

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-022

Client Sample ID: G12D

Matrix: GROUNDWATER

Collection Date: 03/09/2023 13:07

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		42.63	ft	1	03/09/2023 13:07	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		8.2	NTU	1	03/09/2023 13:07	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		107.9	mV	1	03/09/2023 13:07	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		817	µS/cm @25C	1	03/09/2023 13:07	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		14.6	°C	1	03/09/2023 13:07	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		1.29	mg/L	1	03/09/2023 13:07	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.62		1	03/09/2023 13:07	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		146	mg/L	1	03/13/2023 13:45	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 13:45	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		472	mg/L	1	03/14/2023 10:43	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		198	mg/L	10	03/15/2023 18:54	R326055
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.22	mg/L	1	03/14/2023 11:34	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		19	mg/L	1	03/15/2023 18:49	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		85.6	mg/L	1	03/14/2023 17:11	203826
Magnesium	NELAP	0.0500		24.3	mg/L	1	03/14/2023 17:11	203826
Potassium	NELAP	0.100		1.55	mg/L	1	03/14/2023 17:11	203826
Sodium	NELAP	0.0500		27.4	mg/L	1	03/14/2023 17:11	203826
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 2:59	203826
Arsenic	NELAP	0.0010	J	0.0004	mg/L	5	03/15/2023 2:59	203826
Barium	NELAP	0.0010		0.0314	mg/L	5	03/15/2023 2:59	203826
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 2:59	203826
Boron	NELAP	0.0250		6.32	mg/L	5	03/15/2023 2:59	203826
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 2:59	203826
Chromium	NELAP	0.0015		0.0087	mg/L	5	03/15/2023 14:59	203826
Cobalt	NELAP	0.0010	J	0.0004	mg/L	5	03/15/2023 2:59	203826
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 2:59	203826
Lithium	*	0.0030		< 0.0030	mg/L	5	03/15/2023 2:59	203826
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 2:59	203826
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 2:59	203826
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/15/2023 2:59	203826



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-022

**Client Sample ID:** G12D

**Matrix:** GROUNDWATER

**Collection Date:** 03/09/2023 13:07

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 11:33	203833



Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-023

Client Sample ID: G12S

Matrix: GROUNDWATER

Collection Date: 03/09/2023 12:53

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		42.30	ft	1	03/09/2023 12:53	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		5.8	NTU	1	03/09/2023 12:53	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		107.3	mV	1	03/09/2023 12:53	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		804	µS/cm @25C	1	03/09/2023 12:53	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		14.6	°C	1	03/09/2023 12:53	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		1.00	mg/L	1	03/09/2023 12:53	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.55		1	03/09/2023 12:53	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		140	mg/L	1	03/13/2023 12:18	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 12:18	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		470	mg/L	1	03/14/2023 10:43	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		192	mg/L	10	03/15/2023 19:18	R326055
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.22	mg/L	1	03/14/2023 11:36	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		21	mg/L	1	03/15/2023 19:13	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		79.6	mg/L	1	03/14/2023 17:12	203826
Magnesium	NELAP	0.0500		23.2	mg/L	1	03/14/2023 17:12	203826
Potassium	NELAP	0.100		1.56	mg/L	1	03/14/2023 17:12	203826
Sodium	NELAP	0.0500		28.5	mg/L	1	03/14/2023 17:12	203826
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:49	203826
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:49	203826
Barium	NELAP	0.0010		0.0315	mg/L	5	03/15/2023 3:49	203826
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:49	203826
Boron	NELAP	0.0250		6.23	mg/L	5	03/15/2023 3:49	203826
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:49	203826
Chromium	NELAP	0.0015		0.0080	mg/L	5	03/15/2023 15:49	203826
Cobalt	NELAP	0.0010	J	0.0002	mg/L	5	03/15/2023 3:49	203826
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:49	203826
Lithium	*	0.0030		< 0.0030	mg/L	5	03/15/2023 3:49	203826
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 3:49	203826
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:49	203826
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/15/2023 3:49	203826



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-023

**Client Sample ID:** G12S

**Matrix:** GROUNDWATER

**Collection Date:** 03/09/2023 12:53

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	<b>0.00006</b>	mg/L	1	03/14/2023 11:35	203833



## Laboratory Results

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-024

Client Sample ID: G13D

Matrix: GROUNDWATER

Collection Date: 03/09/2023 13:37

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		37.12	ft	1	03/09/2023 13:37	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		< 1.0	NTU	1	03/09/2023 13:37	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		115	mV	1	03/09/2023 13:37	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		777	µS/cm @25C	1	03/09/2023 13:37	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		14.3	°C	1	03/09/2023 13:37	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		1.69	mg/L	1	03/09/2023 13:37	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.61		1	03/09/2023 13:37	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		158	mg/L	1	03/13/2023 12:24	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 12:24	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		430	mg/L	1	03/14/2023 10:43	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		155	mg/L	10	03/15/2023 19:26	R326055
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.22	mg/L	1	03/14/2023 11:47	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		19	mg/L	1	03/15/2023 19:21	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		81.6	mg/L	1	03/14/2023 17:22	203826
Magnesium	NELAP	0.0500		22.1	mg/L	1	03/14/2023 17:22	203826
Potassium	NELAP	0.100		1.74	mg/L	1	03/14/2023 17:22	203826
Sodium	NELAP	0.0500		30.1	mg/L	1	03/14/2023 17:22	203826
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:55	203826
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:55	203826
Barium	NELAP	0.0010		0.0450	mg/L	5	03/15/2023 3:55	203826
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:55	203826
Boron	NELAP	0.0250		5.63	mg/L	5	03/15/2023 3:55	203826
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:55	203826
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 15:55	203826
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:55	203826
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:55	203826
Lithium	*	0.0030	J	0.0015	mg/L	5	03/15/2023 3:55	203826
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 3:55	203826
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 3:55	203826
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/15/2023 3:55	203826



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-024

**Client Sample ID:** G13D

**Matrix:** GROUNDWATER

**Collection Date:** 03/09/2023 13:37

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	<b>0.00012</b>	mg/L	1	03/14/2023 11:37	203833



Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-025

Client Sample ID: G13S

Matrix: GROUNDWATER

Collection Date: 03/09/2023 13:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		37.33	ft	1	03/09/2023 13:25	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		2.2	NTU	1	03/09/2023 13:25	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		112.9	mV	1	03/09/2023 13:25	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		777	µS/cm @25C	1	03/09/2023 13:25	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		14.3	°C	1	03/09/2023 13:25	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		1.51	mg/L	1	03/09/2023 13:25	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.56		1	03/09/2023 13:25	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		150	mg/L	1	03/13/2023 12:30	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 12:30	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		444	mg/L	1	03/14/2023 10:44	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		168	mg/L	10	03/15/2023 19:34	R326055
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.24	mg/L	1	03/14/2023 11:49	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		20	mg/L	1	03/15/2023 19:29	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		79.2	mg/L	1	03/14/2023 17:23	203826
Magnesium	NELAP	0.0500		22.0	mg/L	1	03/14/2023 17:23	203826
Potassium	NELAP	0.100		1.59	mg/L	1	03/14/2023 17:23	203826
Sodium	NELAP	0.0500		29.1	mg/L	1	03/14/2023 17:23	203826
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:01	203826
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:01	203826
Barium	NELAP	0.0010		0.0351	mg/L	5	03/15/2023 4:01	203826
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:01	203826
Boron	NELAP	0.0250		5.47	mg/L	5	03/15/2023 4:01	203826
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:01	203826
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 16:02	203826
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:01	203826
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:01	203826
Lithium	*	0.0030		< 0.0030	mg/L	5	03/15/2023 4:01	203826
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 4:01	203826
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:01	203826
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/15/2023 4:01	203826



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-025

**Client Sample ID:** G13S

**Matrix:** GROUNDWATER

**Collection Date:** 03/09/2023 13:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	<b>0.00009</b>	mg/L	1	03/14/2023 11:40	203833





## Laboratory Results

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-026

Client Sample ID: G14D

Matrix: GROUNDWATER

Collection Date: 03/10/2023 9:14

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		26.22	ft	1	03/10/2023 9:14	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		8.7	NTU	1	03/10/2023 9:14	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		75.3	mV	1	03/10/2023 9:14	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		420.2	µS/cm @25C	1	03/10/2023 9:14	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		12.8	°C	1	03/10/2023 9:14	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		7.90	mg/L	1	03/10/2023 9:14	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.89		1	03/10/2023 9:14	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		90	mg/L	1	03/13/2023 12:35	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 12:35	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		144	mg/L	1	03/14/2023 11:34	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		11	mg/L	1	03/15/2023 19:36	R326055
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.16	mg/L	1	03/14/2023 12:18	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4	J	1	mg/L	1	03/15/2023 19:37	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		24.4	mg/L	1	03/14/2023 17:25	203826
Magnesium	NELAP	0.0500		5.13	mg/L	1	03/14/2023 17:25	203826
Potassium	NELAP	0.100		5.61	mg/L	1	03/14/2023 17:25	203826
Sodium	NELAP	0.0500		1.14	mg/L	1	03/14/2023 17:25	203826
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	J	0.0008	mg/L	5	03/15/2023 4:08	203826
Arsenic	NELAP	0.0010		0.0033	mg/L	5	03/15/2023 4:08	203826
Barium	NELAP	0.0010		0.0340	mg/L	5	03/15/2023 4:08	203826
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:08	203826
Boron	NELAP	0.0250		0.101	mg/L	5	03/15/2023 4:08	203826
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:08	203826
Chromium	NELAP	0.0015		0.0027	mg/L	5	03/15/2023 16:08	203826
Cobalt	NELAP	0.0010	J	0.0005	mg/L	5	03/15/2023 4:08	203826
Lead	NELAP	0.0010		0.0015	mg/L	5	03/15/2023 4:08	203826
Lithium	*	0.0030		0.0048	mg/L	5	03/15/2023 4:08	203826
Molybdenum	NELAP	0.0015	J	0.0011	mg/L	5	03/15/2023 16:08	203826
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:08	203826
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/15/2023 4:08	203826



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-026

**Client Sample ID:** G14D

**Matrix:** GROUNDWATER

**Collection Date:** 03/10/2023 9:14

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 11:46	203833



## Laboratory Results

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-027

Client Sample ID: G14S

Matrix: GROUNDWATER

Collection Date: 03/10/2023 8:57

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		27.69	ft	1	03/10/2023 8:57	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		8.1	NTU	1	03/10/2023 8:57	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		59.7	mV	1	03/10/2023 8:57	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		880	µS/cm @25C	1	03/10/2023 8:57	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		13.8	°C	1	03/10/2023 8:57	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		2.31	mg/L	1	03/10/2023 8:57	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.55		1	03/10/2023 8:57	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		162	mg/L	1	03/13/2023 12:40	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 12:40	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		440	mg/L	1	03/14/2023 11:35	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		166	mg/L	10	03/15/2023 19:50	R326055
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.29	mg/L	1	03/14/2023 12:21	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		19	mg/L	1	03/15/2023 19:45	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		83.9	mg/L	1	03/14/2023 17:26	203826
Magnesium	NELAP	0.0500		21.4	mg/L	1	03/14/2023 17:26	203826
Potassium	NELAP	0.100		1.82	mg/L	1	03/14/2023 17:26	203826
Sodium	NELAP	0.0500		36.8	mg/L	1	03/14/2023 17:26	203826
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:14	203826
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:14	203826
Barium	NELAP	0.0010		0.0415	mg/L	5	03/15/2023 4:14	203826
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:14	203826
Boron	NELAP	0.0250		4.34	mg/L	5	03/15/2023 4:14	203826
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:14	203826
Chromium	NELAP	0.0015	J	0.0008	mg/L	5	03/15/2023 16:14	203826
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:14	203826
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:14	203826
Lithium	*	0.0030		< 0.0030	mg/L	5	03/15/2023 4:14	203826
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 4:14	203826
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:14	203826
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/15/2023 4:14	203826



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-027

**Client Sample ID:** G14S

**Matrix:** GROUNDWATER

**Collection Date:** 03/10/2023 8:57

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 11:49	203833



Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-029

Client Sample ID: G15D

Matrix: GROUNDWATER

Collection Date: 03/09/2023 15:01

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		29.28	ft	1	03/09/2023 15:01	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		70.1	NTU	1	03/09/2023 15:01	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		-28.4	mV	1	03/09/2023 15:01	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		1182	µS/cm @25C	1	03/09/2023 15:01	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		14.2	°C	1	03/09/2023 15:01	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		0.88	mg/L	1	03/09/2023 15:01	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.73		1	03/09/2023 15:01	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		177	mg/L	1	03/13/2023 12:45	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 12:45	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		790	mg/L	1	03/14/2023 10:44	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		382	mg/L	10	03/15/2023 20:14	R326055
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.26	mg/L	1	03/14/2023 11:51	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		18	mg/L	1	03/15/2023 20:09	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		132	mg/L	1	03/14/2023 17:28	203826
Magnesium	NELAP	0.0500		30.2	mg/L	1	03/14/2023 17:28	203826
Potassium	NELAP	0.100		2.88	mg/L	1	03/14/2023 17:28	203826
Sodium	NELAP	0.0500		58.7	mg/L	1	03/14/2023 17:28	203826
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	J	0.0005	mg/L	5	03/15/2023 4:20	203826
Arsenic	NELAP	0.0010		0.0017	mg/L	5	03/15/2023 4:20	203826
Barium	NELAP	0.0010		0.0441	mg/L	5	03/15/2023 4:20	203826
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:20	203826
Boron	NELAP	0.0250		7.22	mg/L	5	03/15/2023 4:20	203826
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:20	203826
Chromium	NELAP	0.0015		0.0017	mg/L	5	03/15/2023 16:20	203826
Cobalt	NELAP	0.0010		0.0092	mg/L	5	03/15/2023 4:20	203826
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:20	203826
Lithium	*	0.0030		0.0031	mg/L	5	03/15/2023 4:20	203826
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 4:20	203826
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:20	203826
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/15/2023 4:20	203826



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-029

**Client Sample ID:** G15D

**Matrix:** GROUNDWATER

**Collection Date:** 03/09/2023 15:01

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 11:51	203833



Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-030

Client Sample ID: G15S

Matrix: GROUNDWATER

Collection Date: 03/09/2023 14:42

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		29.25	ft	1	03/09/2023 14:42	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		9.8	NTU	1	03/09/2023 14:42	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		127.1	mV	1	03/09/2023 14:42	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		548	µS/cm @25C	1	03/09/2023 14:42	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		14.2	°C	1	03/09/2023 14:42	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		1.96	mg/L	1	03/09/2023 14:42	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.19		1	03/09/2023 14:42	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		135	mg/L	1	03/13/2023 13:40	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 13:40	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		310	mg/L	1	03/14/2023 10:44	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	20		89	mg/L	2	03/16/2023 10:28	R326131
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.21	mg/L	1	03/14/2023 11:53	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		5	mg/L	1	03/15/2023 20:17	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		52.0	mg/L	1	03/14/2023 17:30	203826
Magnesium	NELAP	0.0500		18.1	mg/L	1	03/14/2023 17:30	203826
Potassium	NELAP	0.100		0.778	mg/L	1	03/14/2023 17:30	203826
Sodium	NELAP	0.0500		20.5	mg/L	1	03/14/2023 17:30	203826
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:26	203826
Arsenic	NELAP	0.0010	J	0.0005	mg/L	5	03/15/2023 4:26	203826
Barium	NELAP	0.0010		0.0999	mg/L	5	03/15/2023 4:26	203826
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:26	203826
Boron	NELAP	0.0250		1.33	mg/L	5	03/15/2023 4:26	203826
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:26	203826
Chromium	NELAP	0.0015	J	0.0010	mg/L	5	03/15/2023 16:27	203826
Cobalt	NELAP	0.0010		0.0013	mg/L	5	03/15/2023 16:27	203826
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:26	203826
Lithium	*	0.0030	J	0.0030	mg/L	5	03/15/2023 4:26	203826
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 4:26	203826
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:26	203826
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/15/2023 4:26	203826



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-030

**Client Sample ID:** G15S

**Matrix:** GROUNDWATER

**Collection Date:** 03/09/2023 14:42

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 12:02	203833





## Laboratory Results

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-031

Client Sample ID: G16D

Matrix: GROUNDWATER

Collection Date: 03/09/2023 14:07

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		33.93	ft	1	03/09/2023 14:07	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		< 1.0	NTU	1	03/09/2023 14:07	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		-72.8	mV	1	03/09/2023 14:07	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		864	µS/cm @25C	1	03/09/2023 14:07	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		14.3	°C	1	03/09/2023 14:07	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		1.37	mg/L	1	03/09/2023 14:07	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.75		1	03/09/2023 14:07	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		193	mg/L	1	03/13/2023 13:51	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 13:51	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		496	mg/L	1	03/14/2023 10:45	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		183	mg/L	10	03/15/2023 20:29	R326055
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.22	mg/L	1	03/14/2023 11:55	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		16	mg/L	1	03/15/2023 20:25	R326070
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100	S	101	mg/L	1	03/14/2023 17:31	203826
Magnesium	NELAP	0.0500	S	26.5	mg/L	1	03/14/2023 17:31	203826
Potassium	NELAP	0.100		1.72	mg/L	1	03/14/2023 17:31	203826
Sodium	NELAP	0.0500		22.2	mg/L	1	03/14/2023 17:31	203826
<i>Matrix spike control limits are not applicable due to high sample/spike ratio.</i>								
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:33	203826
Arsenic	NELAP	0.0010		0.0015	mg/L	5	03/15/2023 4:33	203826
Barium	NELAP	0.0010		0.0463	mg/L	5	03/15/2023 4:33	203826
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:33	203826
Boron	NELAP	0.0250	S	7.38	mg/L	5	03/15/2023 4:33	203826
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:33	203826
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 16:33	203826
Cobalt	NELAP	0.0010	J	0.0003	mg/L	5	03/15/2023 4:33	203826
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:33	203826
Lithium	*	0.0030	J	0.0018	mg/L	5	03/15/2023 4:33	203826
Molybdenum	NELAP	0.0015		0.0019	mg/L	5	03/15/2023 16:33	203826
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 4:33	203826
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/15/2023 4:33	203826



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-031

**Client Sample ID:** G16D

**Matrix:** GROUNDWATER

**Collection Date:** 03/09/2023 14:07

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
<i>Matrix spike control limits are not applicable due to high sample/spike ratio.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 12:05	203833



## Laboratory Results

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-032

Client Sample ID: G16S

Matrix: GROUNDWATER

Collection Date: 03/09/2023 13:55

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		33.91	ft	1	03/09/2023 13:55	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		9.6	NTU	1	03/09/2023 13:55	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		115.8	mV	1	03/09/2023 13:55	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		1142	µS/cm @25C	1	03/09/2023 13:55	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		14.3	°C	1	03/09/2023 13:55	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		1.55	mg/L	1	03/09/2023 13:55	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.67		1	03/09/2023 13:55	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		243	mg/L	1	03/13/2023 13:57	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 13:57	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		694	mg/L	1	03/14/2023 10:45	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		299	mg/L	10	03/16/2023 10:36	R326131
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.47	mg/L	1	03/14/2023 11:57	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		18	mg/L	1	03/16/2023 10:31	R326143
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		137	mg/L	1	03/14/2023 17:44	203826
Magnesium	NELAP	0.0500		24.5	mg/L	1	03/14/2023 17:44	203826
Potassium	NELAP	0.100		3.67	mg/L	1	03/14/2023 17:44	203826
Sodium	NELAP	0.0500		39.8	mg/L	1	03/14/2023 17:44	203826
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:36	203826
Arsenic	NELAP	0.0010	J	0.0005	mg/L	5	03/15/2023 5:36	203826
Barium	NELAP	0.0010		0.0479	mg/L	5	03/15/2023 5:36	203826
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:36	203826
Boron	NELAP	0.0250		10.6	mg/L	5	03/15/2023 5:36	203826
Cadmium	NELAP	0.0010	J	0.0002	mg/L	5	03/15/2023 5:36	203826
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 17:36	203826
Cobalt	NELAP	0.0010		0.0038	mg/L	5	03/15/2023 17:36	203826
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:36	203826
Lithium	*	0.0030	J	0.0028	mg/L	5	03/15/2023 5:36	203826
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 5:36	203826
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:36	203826
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/15/2023 5:36	203826



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-032

**Client Sample ID:** G16S

**Matrix:** GROUNDWATER

**Collection Date:** 03/09/2023 13:55

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 12:07	203833



Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-033

Client Sample ID: G51D

Matrix: GROUNDWATER

Collection Date: 03/08/2023 15:08

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		41.63	ft	1	03/08/2023 15:08	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		3.0	NTU	1	03/08/2023 15:08	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		166.5	mV	1	03/08/2023 15:08	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		449.1	µS/cm @25C	1	03/08/2023 15:08	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		15.9	°C	1	03/08/2023 15:08	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		2.58	mg/L	1	03/08/2023 15:08	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		5.49		1	03/08/2023 15:08	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		46	mg/L	1	03/13/2023 14:17	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 14:17	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		296	mg/L	1	03/13/2023 13:16	R325983
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		131	mg/L	10	03/16/2023 10:43	R326131
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10	J	0.07	mg/L	1	03/14/2023 10:04	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		5	mg/L	1	03/16/2023 10:39	R326143
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		29.7	mg/L	1	03/14/2023 17:45	203826
Magnesium	NELAP	0.0500		12.3	mg/L	1	03/14/2023 17:45	203826
Potassium	NELAP	0.100		0.235	mg/L	1	03/14/2023 17:45	203826
Sodium	NELAP	0.0500		33.4	mg/L	1	03/14/2023 17:45	203826
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:42	203826
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:42	203826
Barium	NELAP	0.0010		0.0417	mg/L	5	03/15/2023 5:42	203826
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:42	203826
Boron	NELAP	0.0250		0.963	mg/L	5	03/15/2023 5:42	203826
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:42	203826
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 17:42	203826
Cobalt	NELAP	0.0010	J	0.0006	mg/L	5	03/15/2023 5:42	203826
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:42	203826
Lithium	*	0.0030		0.0071	mg/L	5	03/15/2023 5:42	203826
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 5:42	203826
Selenium	NELAP	0.0010		0.0062	mg/L	5	03/15/2023 5:42	203826
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/15/2023 5:42	203826



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-033

**Client Sample ID:** G51D

**Matrix:** GROUNDWATER

**Collection Date:** 03/08/2023 15:08

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 12:09	203833



## Laboratory Results

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-034

Client Sample ID: G52D

Matrix: GROUNDWATER

Collection Date: 03/10/2023 11:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		28.00	ft	1	03/10/2023 11:00	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		8.9	NTU	1	03/10/2023 11:00	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		26.7	mV	1	03/10/2023 11:00	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		604	µS/cm @25C	1	03/10/2023 11:00	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		14.8	°C	1	03/10/2023 11:00	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		10.09	mg/L	1	03/10/2023 11:00	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.54		1	03/10/2023 11:00	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		156	mg/L	1	03/13/2023 14:21	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 14:21	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		292	mg/L	1	03/15/2023 13:25	R326106
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	20		74	mg/L	2	03/16/2023 20:38	R326131
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.22	mg/L	1	03/14/2023 12:22	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		12	mg/L	1	03/16/2023 11:03	R326143
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		49.3	mg/L	1	03/14/2023 17:47	203826
Magnesium	NELAP	0.0500		15.3	mg/L	1	03/14/2023 17:47	203826
Potassium	NELAP	0.100		0.768	mg/L	1	03/14/2023 17:47	203826
Sodium	NELAP	0.0500		27.7	mg/L	1	03/14/2023 17:47	203826
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:51	203826
Arsenic	NELAP	0.0010		0.0017	mg/L	5	03/15/2023 5:51	203826
Barium	NELAP	0.0010		0.307	mg/L	5	03/15/2023 5:51	203826
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:51	203826
Boron	NELAP	0.0250		0.0319	mg/L	5	03/15/2023 5:51	203826
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:51	203826
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 17:48	203826
Cobalt	NELAP	0.0010		0.0022	mg/L	5	03/15/2023 5:51	203826
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:51	203826
Lithium	*	0.0030		0.0034	mg/L	5	03/15/2023 5:51	203826
Molybdenum	NELAP	0.0015	J	0.0009	mg/L	5	03/15/2023 5:51	203826
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:51	203826
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/15/2023 5:51	203826



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-034

**Client Sample ID:** G52D

**Matrix:** GROUNDWATER

**Collection Date:** 03/10/2023 11:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 12:11	203833





Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-035

Client Sample ID: G53D

Matrix: GROUNDWATER

Collection Date: 03/09/2023 10:38

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		35.35	ft	1	03/09/2023 10:38	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		4.2	NTU	1	03/09/2023 10:38	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		3.6	mV	1	03/09/2023 10:38	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		626	µS/cm @25C	1	03/09/2023 10:38	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		15.7	°C	1	03/09/2023 10:38	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		2.03	mg/L	1	03/09/2023 10:38	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.46		1	03/09/2023 10:38	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		177	mg/L	1	03/13/2023 15:06	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 15:06	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		346	mg/L	1	03/14/2023 10:46	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	20		72	mg/L	2	03/16/2023 20:43	R326131
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.59	mg/L	1	03/14/2023 11:59	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		17	mg/L	1	03/16/2023 11:11	R326143
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		38.3	mg/L	1	03/14/2023 17:53	203827
Magnesium	NELAP	0.0500		16.4	mg/L	1	03/14/2023 17:53	203827
Potassium	NELAP	0.100		0.355	mg/L	1	03/14/2023 17:53	203827
Sodium	NELAP	0.0500		49.2	mg/L	1	03/14/2023 17:53	203827
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:57	203827
Arsenic	NELAP	0.0010	J	0.0005	mg/L	5	03/15/2023 5:57	203827
Barium	NELAP	0.0010		0.101	mg/L	5	03/15/2023 5:57	203827
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:57	203827
Boron	NELAP	0.0250		0.370	mg/L	5	03/15/2023 5:57	203827
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:57	203827
Chromium	NELAP	0.0015	J	0.0010	mg/L	5	03/15/2023 17:55	203827
Cobalt	NELAP	0.0010		0.0022	mg/L	5	03/15/2023 17:55	203827
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:57	203827
Lithium	*	0.0030		< 0.0030	mg/L	5	03/15/2023 5:57	203827
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 5:57	203827
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 5:57	203827
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/15/2023 5:57	203827



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-035

**Client Sample ID:** G53D

**Matrix:** GROUNDWATER

**Collection Date:** 03/09/2023 10:38

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 12:14	203833



Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-036

Client Sample ID: G54D

Matrix: GROUNDWATER

Collection Date: 03/09/2023 9:15

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		35.99	ft	1	03/09/2023 9:15	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		84.9	NTU	1	03/09/2023 9:15	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		1.5	mV	1	03/09/2023 9:15	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		1017	µS/cm @25C	1	03/09/2023 9:15	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		15.2	°C	1	03/09/2023 9:15	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		1.14	mg/L	1	03/09/2023 9:15	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.52		1	03/09/2023 9:15	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		210	mg/L	1	03/13/2023 15:10	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 15:10	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		562	mg/L	1	03/14/2023 11:33	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		231	mg/L	10	03/16/2023 11:24	R326131
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.24	mg/L	1	03/14/2023 12:24	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		22	mg/L	1	03/16/2023 11:19	R326143
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		86.9	mg/L	1	03/14/2023 17:55	203827
Magnesium	NELAP	0.0500		26.4	mg/L	1	03/14/2023 17:55	203827
Potassium	NELAP	0.100		1.28	mg/L	1	03/14/2023 17:55	203827
Sodium	NELAP	0.0500		55.7	mg/L	1	03/14/2023 17:55	203827
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 6:04	203827
Arsenic	NELAP	0.0010	J	0.0009	mg/L	5	03/15/2023 6:04	203827
Barium	NELAP	0.0010		0.0724	mg/L	5	03/15/2023 6:04	203827
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 6:04	203827
Boron	NELAP	0.0250		0.555	mg/L	5	03/15/2023 6:04	203827
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 6:04	203827
Chromium	NELAP	0.0015	J	0.0015	mg/L	5	03/15/2023 18:01	203827
Cobalt	NELAP	0.0010		0.0113	mg/L	5	03/15/2023 6:04	203827
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 6:04	203827
Lithium	*	0.0030		0.0031	mg/L	5	03/15/2023 6:04	203827
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 6:04	203827
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 6:04	203827
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/15/2023 6:04	203827



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-036

**Client Sample ID:** G54D

**Matrix:** GROUNDWATER

**Collection Date:** 03/09/2023 9:15

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 13:16	203843



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-038

**Client Sample ID:** SG02

**Matrix:** GROUNDWATER

**Collection Date:** 03/11/2023 17:51

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		286.15	ft	1	03/11/2023 17:51	R326138



Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-059

Client Sample ID: Well 3

Matrix: GROUNDWATER

Collection Date: 03/07/2023 12:51

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		31.51	ft	1	03/07/2023 12:51	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		33.9	NTU	1	03/07/2023 12:51	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		96.5	mV	1	03/07/2023 12:51	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		908	µS/cm @25C	1	03/07/2023 12:51	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		15.7	°C	1	03/07/2023 12:51	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		1.20	mg/L	1	03/07/2023 12:51	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.54		1	03/07/2023 12:51	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		205	mg/L	1	03/13/2023 10:18	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 10:18	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		530	mg/L	1	03/13/2023 13:12	R325983
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		238	mg/L	10	03/16/2023 16:12	R326131
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.27	mg/L	1	03/14/2023 10:59	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	1		11	mg/L	1	03/20/2023 12:54	R326213
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		109	mg/L	1	03/14/2023 18:53	203827
Magnesium	NELAP	0.0500		27.7	mg/L	1	03/14/2023 18:53	203827
Potassium	NELAP	0.100		1.42	mg/L	1	03/14/2023 18:53	203827
Sodium	NELAP	0.0500		29.3	mg/L	1	03/14/2023 18:53	203827
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 9:25	203827
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 20:51	203827
Barium	NELAP	0.0010		0.0710	mg/L	5	03/15/2023 9:25	203827
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 20:51	203827
Boron	NELAP	0.0250		0.724	mg/L	5	03/15/2023 20:51	203827
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 20:51	203827
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 20:51	203827
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 20:51	203827
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 9:25	203827
Lithium	*	0.0030	J	0.0016	mg/L	5	03/15/2023 20:51	203827
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	03/15/2023 20:51	203827
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/15/2023 20:51	203827
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/15/2023 9:25	203827



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-059

**Client Sample ID:** Well 3

**Matrix:** GROUNDWATER

**Collection Date:** 03/07/2023 12:51

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 14:10	203843



Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-060

Client Sample ID: XPW01

Matrix: GROUNDWATER

Collection Date: 03/08/2023 16:14

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		6.1	NTU	1	03/08/2023 16:14	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		-156.9	mV	1	03/08/2023 16:14	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		998	µS/cm @25C	1	03/08/2023 16:14	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		15.9	°C	1	03/08/2023 16:14	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		1.27	mg/L	1	03/08/2023 16:14	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		8.47		1	03/08/2023 16:14	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		64	mg/L	1	03/13/2023 16:44	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		38	mg/L	1	03/13/2023 16:44	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		708	mg/L	1	03/14/2023 9:18	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		414	mg/L	10	03/16/2023 16:19	R326131
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.16	mg/L	1	03/14/2023 11:01	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	1		11	mg/L	1	03/20/2023 12:59	R326213
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		164	mg/L	1	03/15/2023 18:11	203876
Magnesium	NELAP	0.0500		0.254	mg/L	1	03/15/2023 18:11	203876
Potassium	NELAP	1.00		37.2	mg/L	10	03/17/2023 18:35	203876
Sodium	NELAP	0.0500		27.2	mg/L	1	03/15/2023 18:11	203876
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 4:12	203876
Arsenic	NELAP	0.0010		0.0398	mg/L	5	03/16/2023 4:12	203876
Barium	NELAP	0.0010		0.128	mg/L	5	03/16/2023 4:12	203876
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 4:12	203876
Boron	NELAP	0.0250		8.79	mg/L	5	03/18/2023 0:17	203876
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 4:12	203876
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	03/16/2023 4:12	203876
Cobalt	NELAP	0.0010	J	0.0002	mg/L	5	03/16/2023 4:12	203876
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 4:12	203876
Lithium	*	0.0030		< 0.0030	mg/L	5	03/16/2023 4:12	203876
Molybdenum	NELAP	0.0015		0.257	mg/L	5	03/16/2023 4:12	203876
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 12:07	203876
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/16/2023 4:12	203876
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 14:17	203858





## Laboratory Results

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-061

Client Sample ID: XPW02

Matrix: GROUNDWATER

Collection Date: 03/08/2023 11:43

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		Field Error	NTU	1	03/08/2023 11:43	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		Field Error	mV	1	03/08/2023 11:43	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		Field Error	µS/cm @25C	1	03/08/2023 11:43	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		Field Error	°C	1	03/08/2023 11:43	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		Field Error	mg/L	1	03/08/2023 11:43	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		Field Error		1	03/08/2023 11:43	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		145	mg/L	1	03/13/2023 16:50	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	03/13/2023 16:50	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		4460	mg/L	2.5	03/15/2023 11:09	R326106
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	500		2450	mg/L	50	03/20/2023 11:21	R326210
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.48	mg/L	1	03/14/2023 11:04	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		146	mg/L	5	03/16/2023 16:44	R326143
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		479	mg/L	1	03/15/2023 18:14	203876
Magnesium	NELAP	0.0500		8.75	mg/L	1	03/15/2023 18:14	203876
Potassium	NELAP	1.00		23.9	mg/L	10	03/17/2023 18:39	203876
Sodium	NELAP	0.0500		882	mg/L	1	03/15/2023 18:14	203876
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 4:19	203876
Arsenic	NELAP	0.0010		0.0368	mg/L	5	03/16/2023 4:19	203876
Barium	NELAP	0.0010		0.0208	mg/L	5	03/16/2023 4:19	203876
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 4:19	203876
Boron	NELAP	0.0250		10.8	mg/L	5	03/18/2023 0:21	203876
Cadmium	NELAP	0.0010	J	0.0003	mg/L	5	03/16/2023 4:19	203876
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	03/16/2023 4:19	203876
Cobalt	NELAP	0.0010	J	0.0003	mg/L	5	03/16/2023 4:19	203876
Lead	NELAP	0.0010	J	0.0007	mg/L	5	03/16/2023 4:19	203876
Lithium	*	0.0030		0.0674	mg/L	5	03/16/2023 4:19	203876
Molybdenum	NELAP	0.0060		1.98	mg/L	20	03/16/2023 14:01	203876
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 12:14	203876
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/16/2023 4:19	203876
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	S	< 0.00020	mg/L	1	03/14/2023 14:19	203858

Matrix spike did not recover within control limits due to matrix interference. Verified by bench spike.



Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-062

Client Sample ID: XPW03

Matrix: GROUNDWATER

Collection Date: 03/09/2023 15:37

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		< 1.0	NTU	1	03/09/2023 15:37	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		-102.4	mV	1	03/09/2023 15:37	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		822	µS/cm @25C	1	03/09/2023 15:37	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		16.4	°C	1	03/09/2023 15:37	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		2.01	mg/L	1	03/09/2023 15:37	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		10.7		1	03/09/2023 15:37	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 10:24	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		85	mg/L	1	03/13/2023 10:24	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		416	mg/L	1	03/14/2023 11:33	R326043
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		142	mg/L	10	03/16/2023 16:52	R326131
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.24	mg/L	1	03/14/2023 12:36	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		25	mg/L	1	03/16/2023 16:47	R326143
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		11.0	mg/L	1	03/15/2023 18:18	203876
Magnesium	NELAP	0.050	J	0.021	mg/L	1	03/15/2023 18:18	203876
Potassium	NELAP	1.00		23.8	mg/L	10	03/17/2023 18:43	203876
Sodium	NELAP	0.0500		99.6	mg/L	1	03/15/2023 18:18	203876
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0101	mg/L	5	03/16/2023 4:25	203876
Arsenic	NELAP	0.0010		0.492	mg/L	5	03/16/2023 4:25	203876
Barium	NELAP	0.0010		0.0120	mg/L	5	03/16/2023 4:25	203876
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 4:25	203876
Boron	NELAP	0.0250		8.06	mg/L	5	03/18/2023 0:26	203876
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 4:25	203876
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	03/16/2023 4:25	203876
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 4:25	203876
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 4:25	203876
Lithium	*	0.0030		0.157	mg/L	5	03/16/2023 4:25	203876
Molybdenum	NELAP	0.0015		0.233	mg/L	5	03/16/2023 4:25	203876
Selenium	NELAP	0.0010		0.0304	mg/L	5	03/16/2023 12:20	203876
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/16/2023 4:25	203876
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 14:27	203858



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-063

**Client Sample ID:** XSG01

**Matrix:** GROUNDWATER

**Collection Date:** 03/07/2023 16:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		12.00	ft	1	03/07/2023 16:13	R326138



Client: Vistra Energy  
Client Project: JOP-23Q1  
Lab ID: 23021699-071  
Matrix: AQUEOUS

Work Order: 23021699  
Report Date: 10-Apr-23  
Client Sample ID: Field Blank  
Collection Date: 03/10/2023 17:30

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		1	mg/L	1	03/13/2023 16:36	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	03/13/2023 16:36	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		< 20	mg/L	1	03/15/2023 13:25	R326106
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		< 10	mg/L	1	03/16/2023 18:01	R326131
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		< 0.10	mg/L	1	03/14/2023 12:43	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		< 4	mg/L	1	03/16/2023 18:01	R326143
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		< 0.100	mg/L	1	03/15/2023 19:06	203876
Magnesium	NELAP	0.0500		< 0.0500	mg/L	1	03/15/2023 19:06	203876
Potassium	NELAP	0.10	J	0.082	mg/L	1	03/15/2023 19:06	203876
Sodium	NELAP	0.0500		< 0.0500	mg/L	1	03/15/2023 19:06	203876
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 5:23	203876
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 5:23	203876
Barium	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 5:23	203876
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 5:23	203876
Boron	NELAP	0.025	J	0.015	mg/L	5	03/18/2023 1:40	203876
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 5:23	203876
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	03/16/2023 5:23	203876
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 5:23	203876
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 5:23	203876
Lithium	*	0.0030		< 0.0030	mg/L	5	03/16/2023 5:23	203876
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	03/16/2023 5:23	203876
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 14:39	203876
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/16/2023 5:23	203876
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 14:47	203858



## Laboratory Results

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Lab ID: 23021699-072

Client Sample ID: G52D Duplicate

Matrix: GROUNDWATER

Collection Date: 03/10/2023 11:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>								
Depth to water from measuring point	*	0		28.00	ft	1	03/10/2023 11:00	R326138
<b>STANDARD METHODS 2130 B FIELD</b>								
Turbidity	*	1.0		8.9	NTU	1	03/10/2023 11:00	R326138
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>								
Oxidation-Reduction Potential	*	-300		26.7	mV	1	03/10/2023 11:00	R326138
<b>STANDARD METHODS 2510 B FIELD</b>								
Conductivity	*	1		604	µS/cm @25C	1	03/10/2023 11:00	R326138
<b>STANDARD METHODS 2550 B FIELD</b>								
Temperature	*	0		14.8	°C	1	03/10/2023 11:00	R326138
<b>STANDARD METHODS 4500-O G FIELD</b>								
Oxygen, Dissolved	*	0		10.09	mg/L	1	03/10/2023 11:00	R326138
<b>SW-846 9040B FIELD</b>								
pH	*	1.00		6.54		1	03/10/2023 11:00	R326138
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		156	mg/L	1	03/13/2023 16:38	R325940
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	03/13/2023 16:38	R325940
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		292	mg/L	1	03/16/2023 15:00	R326156
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	20		74	mg/L	2	03/20/2023 11:37	R326210
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.22	mg/L	1	03/14/2023 12:00	R325967
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		12	mg/L	1	03/16/2023 18:04	R326143
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		49.6	mg/L	1	03/15/2023 19:10	203876
Magnesium	NELAP	0.0500		14.9	mg/L	1	03/15/2023 19:10	203876
Potassium	NELAP	0.100		0.757	mg/L	1	03/15/2023 19:10	203876
Sodium	NELAP	0.0500		27.5	mg/L	1	03/15/2023 19:10	203876
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 5:29	203876
Arsenic	NELAP	0.0010		0.0012	mg/L	5	03/16/2023 5:29	203876
Barium	NELAP	0.0010		0.223	mg/L	5	03/16/2023 5:29	203876
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 5:29	203876
Boron	NELAP	0.025	J	0.016	mg/L	5	03/18/2023 1:44	203876
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 5:29	203876
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	03/16/2023 5:29	203876
Cobalt	NELAP	0.0010		0.0020	mg/L	5	03/16/2023 5:29	203876
Lead	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 5:29	203876
Lithium	*	0.0030	J	0.0028	mg/L	5	03/16/2023 5:29	203876
Molybdenum	NELAP	0.0015	J	0.0008	mg/L	5	03/16/2023 5:29	203876
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	03/16/2023 14:45	203876
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	03/16/2023 5:29	203876



**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

**Lab ID:** 23021699-072

**Client Sample ID:** G52D Duplicate

**Matrix:** GROUNDWATER

**Collection Date:** 03/10/2023 11:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	03/14/2023 14:50	203858



## Sample Summary

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

**Client:** Vistra Energy  
**Client Project:** JOP-23Q1

**Work Order:** 23021699  
**Report Date:** 10-Apr-23

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
23021699-001	G01D	Groundwater	2	03/07/2023 10:17
23021699-002	G02D	Groundwater	2	03/08/2023 14:27
23021699-003	G03	Groundwater	2	03/09/2023 7:18
23021699-004	G05	Groundwater	2	03/09/2023 11:05
23021699-005	G06	Groundwater	2	03/09/2023 11:56
23021699-006	G07	Groundwater	2	03/09/2023 12:28
23021699-007	G08	Groundwater	2	03/09/2023 10:18
23021699-008	G09	Groundwater	2	03/09/2023 9:47
23021699-010	G10	Groundwater	2	03/08/2023 17:10
23021699-016	G11	Groundwater	2	03/08/2023 15:47
23021699-022	G12D	Groundwater	2	03/09/2023 13:07
23021699-023	G12S	Groundwater	2	03/09/2023 12:53
23021699-024	G13D	Groundwater	2	03/09/2023 13:37
23021699-025	G13S	Groundwater	2	03/09/2023 13:25
23021699-026	G14D	Groundwater	2	03/10/2023 9:14
23021699-027	G14S	Groundwater	2	03/10/2023 8:57
23021699-029	G15D	Groundwater	2	03/09/2023 15:01
23021699-030	G15S	Groundwater	2	03/09/2023 14:42
23021699-031	G16D	Groundwater	2	03/09/2023 14:07
23021699-032	G16S	Groundwater	2	03/09/2023 13:55
23021699-033	G51D	Groundwater	2	03/08/2023 15:08
23021699-034	G52D	Groundwater	2	03/10/2023 11:00
23021699-035	G53D	Groundwater	2	03/09/2023 10:38
23021699-036	G54D	Groundwater	2	03/09/2023 9:15
23021699-038	SG02	Groundwater	1	03/11/2023 17:51
23021699-059	Well 3	Groundwater	2	03/07/2023 12:51
23021699-060	XPW01	Groundwater	2	03/08/2023 16:14
23021699-061	XPW02	Groundwater	2	03/08/2023 11:43
23021699-062	XPW03	Groundwater	2	03/09/2023 15:37
23021699-063	XSG01	Groundwater	1	03/07/2023 16:13
23021699-071	Field Blank	Aqueous	2	03/10/2023 17:30
23021699-072	G52D Duplicate	Groundwater	2	03/10/2023 11:00





## Dates Report

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
23021699-001A	G01D	03/07/2023 10:17	03/11/2023 8:00		
	Field Elevation Measurements				03/07/2023 10:17
	Standard Methods 2130 B Field				03/07/2023 10:17
	Standard Methods 18th Ed. 2580 B Field				03/07/2023 10:17
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 8:44
	Standard Methods 2320 B 1997, 2011				03/13/2023 8:44
	Standard Methods 2510 B Field				03/07/2023 10:17
	Standard Methods 2540 C (Total) 1997, 2011				03/13/2023 11:57
	Standard Methods 2550 B Field				03/07/2023 10:17
	Standard Methods 4500-O G Field				03/07/2023 10:17
	SW-846 9036 (Total)				03/15/2023 14:08
	SW-846 9040B Field				03/07/2023 10:17
	SW-846 9214 (Total)				03/14/2023 9:24
	SW-846 9251 (Total)				03/15/2023 14:09
23021699-001B	G01D	03/07/2023 10:17	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 10:58	03/14/2023 19:33
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/14/2023 13:54
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/15/2023 16:48
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/18/2023 1:49
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 10:05
23021699-002A	G02D	03/08/2023 14:27	03/11/2023 8:00		
	Field Elevation Measurements				03/08/2023 14:27
	Standard Methods 2130 B Field				03/08/2023 14:27
	Standard Methods 18th Ed. 2580 B Field				03/08/2023 14:27
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 11:04
	Standard Methods 2320 B 1997, 2011				03/13/2023 11:04
	Standard Methods 2510 B Field				03/08/2023 14:27
	Standard Methods 2540 C (Total) 1997, 2011				03/13/2023 13:15
	Standard Methods 2550 B Field				03/08/2023 14:27
	Standard Methods 4500-O G Field				03/08/2023 14:27
	SW-846 9036 (Total)				03/15/2023 14:17
	SW-846 9040B Field				03/08/2023 14:27
	SW-846 9214 (Total)				03/14/2023 9:27
	SW-846 9251 (Total)				03/15/2023 14:17
23021699-002B	G02D	03/08/2023 14:27	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 10:58	03/14/2023 19:37
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/14/2023 15:55





## Dates Report

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

Client: **Vistra Energy**

Work Order: **23021699**

Client Project: **JOP-23Q1**

Report Date: **10-Apr-23**

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name				Prep Date/Time	Analysis Date/Time
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/15/2023 18:50
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/18/2023 2:03
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 10:11
23021699-003A	G03	03/09/2023 7:18	03/11/2023 8:00		
	Field Elevation Measurements				03/09/2023 7:18
	Standard Methods 2130 B Field				03/09/2023 7:18
	Standard Methods 18th Ed. 2580 B Field				03/09/2023 7:18
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 11:15
	Standard Methods 2320 B 1997, 2011				03/13/2023 11:15
	Standard Methods 2510 B Field				03/09/2023 7:18
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 9:39
	Standard Methods 2550 B Field				03/09/2023 7:18
	Standard Methods 4500-O G Field				03/09/2023 7:18
	SW-846 9036 (Total)				03/16/2023 10:17
	SW-846 9040B Field				03/09/2023 7:18
	SW-846 9214 (Total)				03/14/2023 11:23
	SW-846 9251 (Total)				03/15/2023 14:41
23021699-003B	G03	03/09/2023 7:18	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 10:58	03/14/2023 19:48
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/14/2023 14:00
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/15/2023 18:05
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/18/2023 1:53
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 10:14
23021699-004A	G05	03/09/2023 11:05	03/11/2023 8:00		
	Field Elevation Measurements				03/09/2023 11:05
	Standard Methods 2130 B Field				03/09/2023 11:05
	Standard Methods 18th Ed. 2580 B Field				03/09/2023 11:05
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 11:20
	Standard Methods 2320 B 1997, 2011				03/13/2023 11:20
	Standard Methods 2510 B Field				03/09/2023 11:05
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 9:39
	Standard Methods 2550 B Field				03/09/2023 11:05
	Standard Methods 4500-O G Field				03/09/2023 11:05
	SW-846 9036 (Total)				03/16/2023 10:23
	SW-846 9040B Field				03/09/2023 11:05
	SW-846 9214 (Total)				03/14/2023 11:25
	SW-846 9251 (Total)				03/15/2023 14:49



## Dates Report

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

Client: **Vistra Energy**

Work Order: **23021699**

Client Project: **JOP-23Q1**

Report Date: **10-Apr-23**

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
23021699-004B	G05	03/09/2023 11:05	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 10:58	03/14/2023 19:52
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/14/2023 15:17
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/15/2023 18:11
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/18/2023 1:58
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 10:16
23021699-005A	G06	03/09/2023 11:56	03/11/2023 8:00		
	Field Elevation Measurements				03/09/2023 11:56
	Standard Methods 2130 B Field				03/09/2023 11:56
	Standard Methods 18th Ed. 2580 B Field				03/09/2023 11:56
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 11:25
	Standard Methods 2320 B 1997, 2011				03/13/2023 11:25
	Standard Methods 2510 B Field				03/09/2023 11:56
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 9:39
	Standard Methods 2550 B Field				03/09/2023 11:56
	Standard Methods 4500-O G Field				03/09/2023 11:56
	SW-846 9036 (Total)				03/15/2023 15:02
	SW-846 9040B Field				03/09/2023 11:56
	SW-846 9214 (Total)				03/14/2023 11:27
	SW-846 9251 (Total)				03/15/2023 14:57
23021699-005B	G06	03/09/2023 11:56	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 10:58	03/14/2023 20:10
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/14/2023 15:23
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/15/2023 18:18
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/18/2023 2:48
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 10:23
23021699-006A	G07	03/09/2023 12:28	03/11/2023 8:00		
	Field Elevation Measurements				03/09/2023 12:28
	Standard Methods 2130 B Field				03/09/2023 12:28
	Standard Methods 18th Ed. 2580 B Field				03/09/2023 12:28
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 11:31
	Standard Methods 2320 B 1997, 2011				03/13/2023 11:31
	Standard Methods 2510 B Field				03/09/2023 12:28
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 9:40
	Standard Methods 2550 B Field				03/09/2023 12:28
	Standard Methods 4500-O G Field				03/09/2023 12:28
	SW-846 9036 (Total)				03/15/2023 15:10



## Dates Report

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

Client: **Vistra Energy**

Work Order: **23021699**

Client Project: **JOP-23Q1**

Report Date: **10-Apr-23**

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
	SW-846 9040B Field				03/09/2023 12:28
	SW-846 9214 (Total)				03/14/2023 11:29
	SW-846 9251 (Total)				03/15/2023 15:05
23021699-006B	G07	03/09/2023 12:28	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 10:58	03/14/2023 20:14
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/14/2023 15:29
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/15/2023 18:24
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/18/2023 2:53
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 10:25
23021699-007A	G08	03/09/2023 10:18	03/11/2023 8:00		
	Field Elevation Measurements				03/09/2023 10:18
	Standard Methods 2130 B Field				03/09/2023 10:18
	Standard Methods 18th Ed. 2580 B Field				03/09/2023 10:18
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 11:37
	Standard Methods 2320 B 1997, 2011				03/13/2023 11:37
	Standard Methods 2510 B Field				03/09/2023 10:18
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 9:40
	Standard Methods 2550 B Field				03/09/2023 10:18
	Standard Methods 4500-O G Field				03/09/2023 10:18
	SW-846 9036 (Total)				03/15/2023 15:18
	SW-846 9040B Field				03/09/2023 10:18
	SW-846 9214 (Total)				03/14/2023 11:30
	SW-846 9251 (Total)				03/15/2023 15:13
23021699-007B	G08	03/09/2023 10:18	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 10:58	03/14/2023 20:18
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/14/2023 15:36
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/15/2023 18:30
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/18/2023 2:57
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 10:27
23021699-008A	G09	03/09/2023 9:47	03/11/2023 8:00		
	Field Elevation Measurements				03/09/2023 9:47
	Standard Methods 2130 B Field				03/09/2023 9:47
	Standard Methods 18th Ed. 2580 B Field				03/09/2023 9:47
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 11:44
	Standard Methods 2320 B 1997, 2011				03/13/2023 11:44
	Standard Methods 2510 B Field				03/09/2023 9:47
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 9:41



## Dates Report

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

**Client:** Vistra Energy  
**Client Project:** JOP-23Q1

**Work Order:** 23021699  
**Report Date:** 10-Apr-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	Standard Methods 2550 B Field				03/09/2023 9:47
	Standard Methods 4500-O G Field				03/09/2023 9:47
	SW-846 9036 (Total)				03/15/2023 15:42
	SW-846 9040B Field				03/09/2023 9:47
	SW-846 9214 (Total)				03/14/2023 11:32
	SW-846 9251 (Total)				03/15/2023 15:37
23021699-008B	G09	03/09/2023 9:47	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 10:58	03/14/2023 20:21
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/14/2023 15:42
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/15/2023 18:37
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/18/2023 3:02
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 10:30
23021699-010A	G10	03/08/2023 17:10	03/11/2023 8:00		
	Field Elevation Measurements				03/08/2023 17:10
	Standard Methods 2130 B Field				03/08/2023 17:10
	Standard Methods 18th Ed. 2580 B Field				03/08/2023 17:10
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 11:49
	Standard Methods 2320 B 1997, 2011				03/13/2023 11:49
	Standard Methods 2510 B Field				03/08/2023 17:10
	Standard Methods 2540 C (Total) 1997, 2011				03/13/2023 13:15
	Standard Methods 2550 B Field				03/08/2023 17:10
	Standard Methods 4500-O G Field				03/08/2023 17:10
	SW-846 9036 (Total)				03/15/2023 15:50
	SW-846 9040B Field				03/08/2023 17:10
	SW-846 9214 (Total)				03/14/2023 9:41
	SW-846 9251 (Total)				03/15/2023 15:45
23021699-010B	G10	03/08/2023 17:10	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 10:58	03/14/2023 20:25
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/14/2023 15:49
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/15/2023 18:43
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 10:58	03/18/2023 3:07
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 10:32
23021699-016A	G11	03/08/2023 15:47	03/11/2023 8:00		
	Field Elevation Measurements				03/08/2023 15:47
	Standard Methods 2130 B Field				03/08/2023 15:47
	Standard Methods 18th Ed. 2580 B Field				03/08/2023 15:47
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 13:05



## Dates Report

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

Client: **Vistra Energy**

Work Order: **23021699**

Client Project: **JOP-23Q1**

Report Date: **10-Apr-23**

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	Standard Methods 2320 B 1997, 2011				03/13/2023 13:05
	Standard Methods 2510 B Field				03/08/2023 15:47
	Standard Methods 2540 C (Total) 1997, 2011				03/13/2023 13:15
	Standard Methods 2550 B Field				03/08/2023 15:47
	Standard Methods 4500-O G Field				03/08/2023 15:47
	SW-846 9036 (Total)				03/15/2023 17:07
	SW-846 9040B Field				03/08/2023 15:47
	SW-846 9214 (Total)				03/14/2023 9:45
	SW-846 9251 (Total)				03/15/2023 17:02
23021699-016B	G11	03/08/2023 15:47	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 11:47	03/14/2023 14:36
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 3:05
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 15:05
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 11:15
23021699-022A	G12D	03/09/2023 13:07	03/11/2023 8:00		
	Field Elevation Measurements				03/09/2023 13:07
	Standard Methods 2130 B Field				03/09/2023 13:07
	Standard Methods 18th Ed. 2580 B Field				03/09/2023 13:07
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 13:45
	Standard Methods 2320 B 1997, 2011				03/13/2023 13:45
	Standard Methods 2510 B Field				03/09/2023 13:07
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 10:43
	Standard Methods 2550 B Field				03/09/2023 13:07
	Standard Methods 4500-O G Field				03/09/2023 13:07
	SW-846 9036 (Total)				03/15/2023 18:54
	SW-846 9040B Field				03/09/2023 13:07
	SW-846 9214 (Total)				03/14/2023 11:34
	SW-846 9251 (Total)				03/15/2023 18:49
23021699-022B	G12D	03/09/2023 13:07	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 11:47	03/14/2023 17:11
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 2:59
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 14:59
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 11:33
23021699-023A	G12S	03/09/2023 12:53	03/11/2023 8:00		
	Field Elevation Measurements				03/09/2023 12:53
	Standard Methods 2130 B Field				03/09/2023 12:53
	Standard Methods 18th Ed. 2580 B Field				03/09/2023 12:53



## Dates Report

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

Client: **Vistra Energy**

Work Order: **23021699**

Client Project: **JOP-23Q1**

Report Date: **10-Apr-23**

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 12:18
	Standard Methods 2320 B 1997, 2011				03/13/2023 12:18
	Standard Methods 2510 B Field				03/09/2023 12:53
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 10:43
	Standard Methods 2550 B Field				03/09/2023 12:53
	Standard Methods 4500-O G Field				03/09/2023 12:53
	SW-846 9036 (Total)				03/15/2023 19:18
	SW-846 9040B Field				03/09/2023 12:53
	SW-846 9214 (Total)				03/14/2023 11:36
	SW-846 9251 (Total)				03/15/2023 19:13
23021699-023B	G12S	03/09/2023 12:53	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 11:47	03/14/2023 17:12
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 3:49
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 15:49
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 11:35
23021699-024A	G13D	03/09/2023 13:37	03/11/2023 8:00		
	Field Elevation Measurements				03/09/2023 13:37
	Standard Methods 2130 B Field				03/09/2023 13:37
	Standard Methods 18th Ed. 2580 B Field				03/09/2023 13:37
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 12:24
	Standard Methods 2320 B 1997, 2011				03/13/2023 12:24
	Standard Methods 2510 B Field				03/09/2023 13:37
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 10:43
	Standard Methods 2550 B Field				03/09/2023 13:37
	Standard Methods 4500-O G Field				03/09/2023 13:37
	SW-846 9036 (Total)				03/15/2023 19:26
	SW-846 9040B Field				03/09/2023 13:37
	SW-846 9214 (Total)				03/14/2023 11:47
	SW-846 9251 (Total)				03/15/2023 19:21
23021699-024B	G13D	03/09/2023 13:37	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 11:47	03/14/2023 17:22
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 3:55
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 15:55
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 11:37
23021699-025A	G13S	03/09/2023 13:25	03/11/2023 8:00		
	Field Elevation Measurements				03/09/2023 13:25
	Standard Methods 2130 B Field				03/09/2023 13:25



## Dates Report

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

Client: **Vistra Energy**

Work Order: **23021699**

Client Project: **JOP-23Q1**

Report Date: **10-Apr-23**

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
	Standard Methods 18th Ed. 2580 B Field				03/09/2023 13:25
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 12:30
	Standard Methods 2320 B 1997, 2011				03/13/2023 12:30
	Standard Methods 2510 B Field				03/09/2023 13:25
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 10:44
	Standard Methods 2550 B Field				03/09/2023 13:25
	Standard Methods 4500-O G Field				03/09/2023 13:25
	SW-846 9036 (Total)				03/15/2023 19:34
	SW-846 9040B Field				03/09/2023 13:25
	SW-846 9214 (Total)				03/14/2023 11:49
	SW-846 9251 (Total)				03/15/2023 19:29
23021699-025B	G13S	03/09/2023 13:25	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 11:47	03/14/2023 17:23
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 4:01
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 16:02
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 11:40
23021699-026A	G14D	03/10/2023 9:14	03/11/2023 8:00		
	Field Elevation Measurements				03/10/2023 9:14
	Standard Methods 2130 B Field				03/10/2023 9:14
	Standard Methods 18th Ed. 2580 B Field				03/10/2023 9:14
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 12:35
	Standard Methods 2320 B 1997, 2011				03/13/2023 12:35
	Standard Methods 2510 B Field				03/10/2023 9:14
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 11:34
	Standard Methods 2550 B Field				03/10/2023 9:14
	Standard Methods 4500-O G Field				03/10/2023 9:14
	SW-846 9036 (Total)				03/15/2023 19:36
	SW-846 9040B Field				03/10/2023 9:14
	SW-846 9214 (Total)				03/14/2023 12:18
	SW-846 9251 (Total)				03/15/2023 19:37
23021699-026B	G14D	03/10/2023 9:14	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 11:47	03/14/2023 17:25
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 4:08
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 16:08
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 11:46
23021699-027A	G14S	03/10/2023 8:57	03/11/2023 8:00		
	Field Elevation Measurements				03/10/2023 8:57





## Dates Report

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

Client: **Vistra Energy**

Work Order: **23021699**

Client Project: **JOP-23Q1**

Report Date: **10-Apr-23**

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	Standard Methods 2130 B Field				03/10/2023 8:57
	Standard Methods 18th Ed. 2580 B Field				03/10/2023 8:57
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 12:40
	Standard Methods 2320 B 1997, 2011				03/13/2023 12:40
	Standard Methods 2510 B Field				03/10/2023 8:57
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 11:35
	Standard Methods 2550 B Field				03/10/2023 8:57
	Standard Methods 4500-O G Field				03/10/2023 8:57
	SW-846 9036 (Total)				03/15/2023 19:50
	SW-846 9040B Field				03/10/2023 8:57
	SW-846 9214 (Total)				03/14/2023 12:21
	SW-846 9251 (Total)				03/15/2023 19:45
23021699-027B	G14S	03/10/2023 8:57	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 11:47	03/14/2023 17:26
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 4:14
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 16:14
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 11:49
23021699-029A	G15D	03/09/2023 15:01	03/11/2023 8:00		
	Field Elevation Measurements				03/09/2023 15:01
	Standard Methods 2130 B Field				03/09/2023 15:01
	Standard Methods 18th Ed. 2580 B Field				03/09/2023 15:01
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 12:45
	Standard Methods 2320 B 1997, 2011				03/13/2023 12:45
	Standard Methods 2510 B Field				03/09/2023 15:01
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 10:44
	Standard Methods 2550 B Field				03/09/2023 15:01
	Standard Methods 4500-O G Field				03/09/2023 15:01
	SW-846 9036 (Total)				03/15/2023 20:14
	SW-846 9040B Field				03/09/2023 15:01
	SW-846 9214 (Total)				03/14/2023 11:51
	SW-846 9251 (Total)				03/15/2023 20:09
23021699-029B	G15D	03/09/2023 15:01	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 11:47	03/14/2023 17:28
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 4:20
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 16:20
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 11:51
23021699-030A	G15S	03/09/2023 14:42	03/11/2023 8:00		





## Dates Report

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

**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	Field Elevation Measurements				03/09/2023 14:42
	Standard Methods 2130 B Field				03/09/2023 14:42
	Standard Methods 18th Ed. 2580 B Field				03/09/2023 14:42
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 13:40
	Standard Methods 2320 B 1997, 2011				03/13/2023 13:40
	Standard Methods 2510 B Field				03/09/2023 14:42
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 10:44
	Standard Methods 2550 B Field				03/09/2023 14:42
	Standard Methods 4500-O G Field				03/09/2023 14:42
	SW-846 9036 (Total)				03/16/2023 10:28
	SW-846 9040B Field				03/09/2023 14:42
	SW-846 9214 (Total)				03/14/2023 11:53
	SW-846 9251 (Total)				03/15/2023 20:17
23021699-030B	G15S	03/09/2023 14:42	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 11:47	03/14/2023 17:30
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 4:26
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 16:27
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 12:02
23021699-031A	G16D	03/09/2023 14:07	03/11/2023 8:00		
	Field Elevation Measurements				03/09/2023 14:07
	Standard Methods 2130 B Field				03/09/2023 14:07
	Standard Methods 18th Ed. 2580 B Field				03/09/2023 14:07
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 13:51
	Standard Methods 2320 B 1997, 2011				03/13/2023 13:51
	Standard Methods 2510 B Field				03/09/2023 14:07
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 10:45
	Standard Methods 2550 B Field				03/09/2023 14:07
	Standard Methods 4500-O G Field				03/09/2023 14:07
	SW-846 9036 (Total)				03/15/2023 20:29
	SW-846 9040B Field				03/09/2023 14:07
	SW-846 9214 (Total)				03/14/2023 11:55
	SW-846 9251 (Total)				03/15/2023 20:25
23021699-031B	G16D	03/09/2023 14:07	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 11:47	03/14/2023 17:31
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 4:33
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 16:33
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 12:05



## Dates Report

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

Client: **Vistra Energy**

Work Order: **23021699**

Client Project: **JOP-23Q1**

Report Date: **10-Apr-23**

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
23021699-032A	G16S	03/09/2023 13:55	03/11/2023 8:00		
	Field Elevation Measurements				03/09/2023 13:55
	Standard Methods 2130 B Field				03/09/2023 13:55
	Standard Methods 18th Ed. 2580 B Field				03/09/2023 13:55
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 13:57
	Standard Methods 2320 B 1997, 2011				03/13/2023 13:57
	Standard Methods 2510 B Field				03/09/2023 13:55
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 10:45
	Standard Methods 2550 B Field				03/09/2023 13:55
	Standard Methods 4500-O G Field				03/09/2023 13:55
	SW-846 9036 (Total)				03/16/2023 10:36
	SW-846 9040B Field				03/09/2023 13:55
	SW-846 9214 (Total)				03/14/2023 11:57
	SW-846 9251 (Total)				03/16/2023 10:31
23021699-032B	G16S	03/09/2023 13:55	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 11:47	03/14/2023 17:44
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 5:36
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 17:36
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 12:07
23021699-033A	G51D	03/08/2023 15:08	03/11/2023 8:00		
	Field Elevation Measurements				03/08/2023 15:08
	Standard Methods 2130 B Field				03/08/2023 15:08
	Standard Methods 18th Ed. 2580 B Field				03/08/2023 15:08
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 14:17
	Standard Methods 2320 B 1997, 2011				03/13/2023 14:17
	Standard Methods 2510 B Field				03/08/2023 15:08
	Standard Methods 2540 C (Total) 1997, 2011				03/13/2023 13:16
	Standard Methods 2550 B Field				03/08/2023 15:08
	Standard Methods 4500-O G Field				03/08/2023 15:08
	SW-846 9036 (Total)				03/16/2023 10:43
	SW-846 9040B Field				03/08/2023 15:08
	SW-846 9214 (Total)				03/14/2023 10:04
	SW-846 9251 (Total)				03/16/2023 10:39
23021699-033B	G51D	03/08/2023 15:08	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 11:47	03/14/2023 17:45
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 5:42
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 17:42



## Dates Report

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

Client: **Vistra Energy**

Work Order: **23021699**

Client Project: **JOP-23Q1**

Report Date: **10-Apr-23**

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name				Prep Date/Time	Analysis Date/Time
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 12:09
23021699-034A	G52D	03/10/2023 11:00	03/11/2023 8:00		
	Field Elevation Measurements				03/10/2023 11:00
	Standard Methods 2130 B Field				03/10/2023 11:00
	Standard Methods 18th Ed. 2580 B Field				03/10/2023 11:00
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 14:21
	Standard Methods 2320 B 1997, 2011				03/13/2023 14:21
	Standard Methods 2510 B Field				03/10/2023 11:00
	Standard Methods 2540 C (Total) 1997, 2011				03/15/2023 13:25
	Standard Methods 2550 B Field				03/10/2023 11:00
	Standard Methods 4500-O G Field				03/10/2023 11:00
	SW-846 9036 (Total)				03/16/2023 20:38
	SW-846 9040B Field				03/10/2023 11:00
	SW-846 9214 (Total)				03/14/2023 12:22
	SW-846 9251 (Total)				03/16/2023 11:03
23021699-034B	G52D	03/10/2023 11:00	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 11:47	03/14/2023 17:47
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 5:51
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:47	03/15/2023 17:48
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 12:11
23021699-035A	G53D	03/09/2023 10:38	03/11/2023 8:00		
	Field Elevation Measurements				03/09/2023 10:38
	Standard Methods 2130 B Field				03/09/2023 10:38
	Standard Methods 18th Ed. 2580 B Field				03/09/2023 10:38
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 15:06
	Standard Methods 2320 B 1997, 2011				03/13/2023 15:06
	Standard Methods 2510 B Field				03/09/2023 10:38
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 10:46
	Standard Methods 2550 B Field				03/09/2023 10:38
	Standard Methods 4500-O G Field				03/09/2023 10:38
	SW-846 9036 (Total)				03/16/2023 20:43
	SW-846 9040B Field				03/09/2023 10:38
	SW-846 9214 (Total)				03/14/2023 11:59
	SW-846 9251 (Total)				03/16/2023 11:11
23021699-035B	G53D	03/09/2023 10:38	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 11:50	03/14/2023 17:53
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:50	03/15/2023 5:57



## Dates Report

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

**Client:** Vistra Energy

**Work Order:** 23021699

**Client Project:** JOP-23Q1

**Report Date:** 10-Apr-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name				Prep Date/Time	Analysis Date/Time
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:50	03/15/2023 17:55
	SW-846 7470A (Total)			03/13/2023 19:45	03/14/2023 12:14
23021699-036A	G54D	03/09/2023 9:15	03/11/2023 8:00		
	Field Elevation Measurements				03/09/2023 9:15
	Standard Methods 2130 B Field				03/09/2023 9:15
	Standard Methods 18th Ed. 2580 B Field				03/09/2023 9:15
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 15:10
	Standard Methods 2320 B 1997, 2011				03/13/2023 15:10
	Standard Methods 2510 B Field				03/09/2023 9:15
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 11:33
	Standard Methods 2550 B Field				03/09/2023 9:15
	Standard Methods 4500-O G Field				03/09/2023 9:15
	SW-846 9036 (Total)				03/16/2023 11:24
	SW-846 9040B Field				03/09/2023 9:15
	SW-846 9214 (Total)				03/14/2023 12:24
	SW-846 9251 (Total)				03/16/2023 11:19
23021699-036B	G54D	03/09/2023 9:15	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 11:50	03/14/2023 17:55
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:50	03/15/2023 6:04
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:50	03/15/2023 18:01
	SW-846 7470A (Total)			03/14/2023 8:23	03/14/2023 13:16
23021699-038A	SG02	03/11/2023 17:51	03/11/2023 8:00		
	Field Elevation Measurements				03/11/2023 17:51
23021699-059A	Well 3	03/07/2023 12:51	03/11/2023 8:00		
	Field Elevation Measurements				03/07/2023 12:51
	Standard Methods 2130 B Field				03/07/2023 12:51
	Standard Methods 18th Ed. 2580 B Field				03/07/2023 12:51
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 10:18
	Standard Methods 2320 B 1997, 2011				03/13/2023 10:18
	Standard Methods 2510 B Field				03/07/2023 12:51
	Standard Methods 2540 C (Total) 1997, 2011				03/13/2023 13:12
	Standard Methods 2550 B Field				03/07/2023 12:51
	Standard Methods 4500-O G Field				03/07/2023 12:51
	SW-846 9036 (Total)				03/16/2023 16:12
	SW-846 9040B Field				03/07/2023 12:51
	SW-846 9214 (Total)				03/14/2023 10:59
	SW-846 9251 (Total)				03/20/2023 12:54



## Dates Report

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

Client: **Vistra Energy**

Work Order: **23021699**

Client Project: **JOP-23Q1**

Report Date: **10-Apr-23**

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
23021699-059B	Well 3	03/07/2023 12:51	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/13/2023 11:50	03/14/2023 18:53
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:50	03/15/2023 9:25
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/13/2023 11:50	03/15/2023 20:51
	SW-846 7470A (Total)			03/14/2023 8:23	03/14/2023 14:10
23021699-060A	XPW01	03/08/2023 16:14	03/11/2023 8:00		
	Standard Methods 2130 B Field				03/08/2023 16:14
	Standard Methods 18th Ed. 2580 B Field				03/08/2023 16:14
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 16:44
	Standard Methods 2320 B 1997, 2011				03/13/2023 16:44
	Standard Methods 2510 B Field				03/08/2023 16:14
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 9:18
	Standard Methods 2550 B Field				03/08/2023 16:14
	Standard Methods 4500-O G Field				03/08/2023 16:14
	SW-846 9036 (Total)				03/16/2023 16:19
	SW-846 9040B Field				03/08/2023 16:14
	SW-846 9214 (Total)				03/14/2023 11:01
	SW-846 9251 (Total)				03/20/2023 12:59
23021699-060B	XPW01	03/08/2023 16:14	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/14/2023 15:03	03/15/2023 18:11
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/14/2023 15:03	03/17/2023 18:35
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/14/2023 15:03	03/16/2023 4:12
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/14/2023 15:03	03/16/2023 12:07
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/14/2023 15:03	03/18/2023 0:17
	SW-846 7470A (Total)			03/14/2023 8:27	03/14/2023 14:17
23021699-061A	XPW02	03/08/2023 11:43	03/11/2023 8:00		
	Standard Methods 2130 B Field				03/08/2023 11:43
	Standard Methods 18th Ed. 2580 B Field				03/08/2023 11:43
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 16:50
	Standard Methods 2320 B 1997, 2011				03/13/2023 16:50
	Standard Methods 2510 B Field				03/08/2023 11:43
	Standard Methods 2540 C (Total) 1997, 2011				03/15/2023 11:09
	Standard Methods 2550 B Field				03/08/2023 11:43
	Standard Methods 4500-O G Field				03/08/2023 11:43
	SW-846 9036 (Total)				03/20/2023 11:21
	SW-846 9040B Field				03/08/2023 11:43
	SW-846 9214 (Total)				03/14/2023 11:04



## Dates Report

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

Client: **Vistra Energy**

Work Order: **23021699**

Client Project: **JOP-23Q1**

Report Date: **10-Apr-23**

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name				Prep Date/Time	Analysis Date/Time
	SW-846 9251 (Total)				03/16/2023 16:44
23021699-061B	XPW02	03/08/2023 11:43	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/14/2023 15:03	03/15/2023 18:14
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/14/2023 15:03	03/17/2023 18:39
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/14/2023 15:03	03/16/2023 4:19
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/14/2023 15:03	03/16/2023 12:14
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/14/2023 15:03	03/16/2023 14:01
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/14/2023 15:03	03/18/2023 0:21
	SW-846 7470A (Total)			03/14/2023 8:27	03/14/2023 14:19
23021699-062A	XPW03	03/09/2023 15:37	03/11/2023 8:00		
	Standard Methods 2130 B Field				03/09/2023 15:37
	Standard Methods 18th Ed. 2580 B Field				03/09/2023 15:37
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 10:24
	Standard Methods 2320 B 1997, 2011				03/13/2023 10:24
	Standard Methods 2510 B Field				03/09/2023 15:37
	Standard Methods 2540 C (Total) 1997, 2011				03/14/2023 11:33
	Standard Methods 2550 B Field				03/09/2023 15:37
	Standard Methods 4500-O G Field				03/09/2023 15:37
	SW-846 9036 (Total)				03/16/2023 16:52
	SW-846 9040B Field				03/09/2023 15:37
	SW-846 9214 (Total)				03/14/2023 12:36
	SW-846 9251 (Total)				03/16/2023 16:47
23021699-062B	XPW03	03/09/2023 15:37	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/14/2023 15:03	03/15/2023 18:18
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/14/2023 15:03	03/17/2023 18:43
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/14/2023 15:03	03/16/2023 4:25
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/14/2023 15:03	03/16/2023 12:20
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/14/2023 15:03	03/18/2023 0:26
	SW-846 7470A (Total)			03/14/2023 8:27	03/14/2023 14:27
23021699-063A	XSG01	03/07/2023 16:13	03/11/2023 8:00		
	Field Elevation Measurements				03/07/2023 16:13
23021699-071A	Field Blank	03/10/2023 17:30	03/11/2023 8:00		
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 16:36
	Standard Methods 2320 B 1997, 2011				03/13/2023 16:36
	Standard Methods 2540 C (Total) 1997, 2011				03/15/2023 13:25
	SW-846 9036 (Total)				03/16/2023 18:01
	SW-846 9214 (Total)				03/14/2023 12:43



## Dates Report

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

Client: **Vistra Energy**

Work Order: **23021699**

Client Project: **JOP-23Q1**

Report Date: **10-Apr-23**

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
	SW-846 9251 (Total)				03/16/2023 18:01
23021699-071B	Field Blank	03/10/2023 17:30	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/14/2023 15:03	03/15/2023 19:06
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/14/2023 15:03	03/16/2023 5:23
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/14/2023 15:03	03/16/2023 14:39
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/14/2023 15:03	03/18/2023 1:40
	SW-846 7470A (Total)			03/14/2023 8:27	03/14/2023 14:47
23021699-072A	G52D Duplicate	03/10/2023 11:00	03/11/2023 8:00		
	Field Elevation Measurements				03/10/2023 11:00
	Standard Methods 2130 B Field				03/10/2023 11:00
	Standard Methods 18th Ed. 2580 B Field				03/10/2023 11:00
	Standard Methods 2320 B (Total) 1997, 2011				03/13/2023 16:38
	Standard Methods 2320 B 1997, 2011				03/13/2023 16:38
	Standard Methods 2510 B Field				03/10/2023 11:00
	Standard Methods 2540 C (Total) 1997, 2011				03/16/2023 15:00
	Standard Methods 2550 B Field				03/10/2023 11:00
	Standard Methods 4500-O G Field				03/10/2023 11:00
	SW-846 9036 (Total)				03/20/2023 11:37
	SW-846 9040B Field				03/10/2023 11:00
	SW-846 9214 (Total)				03/14/2023 12:00
	SW-846 9251 (Total)				03/16/2023 18:04
23021699-072B	G52D Duplicate	03/10/2023 11:00	03/11/2023 8:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			03/14/2023 15:03	03/15/2023 19:10
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/14/2023 15:03	03/16/2023 5:29
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/14/2023 15:03	03/16/2023 14:45
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			03/14/2023 15:03	03/18/2023 1:44
	SW-846 7470A (Total)			03/14/2023 8:27	03/14/2023 14:50





## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

### STANDARD METHODS 2510 B FIELD

Batch R326138 SampType: LCS Units  $\mu\text{S/cm @25C}$

SampID: LCS-R326138

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Conductivity	*	1		1412	1409	0	100.2	90	110	03/08/2023
Conductivity	*	1		1487	1409	0	105.5	90	110	03/09/2023
Conductivity	*	1		1382	1409	0	98.1	90	110	03/10/2023
Conductivity	*	1		1411	1409	0	100.1	90	110	03/07/2023

### SW-846 9040B FIELD

Batch R326138 SampType: LCS Units

SampID: LCS-R326138

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	03/07/2023
pH	*	1.00		7.00	7.000	0	100.0	98.57	101.4	03/08/2023
pH	*	1.00		7.04	7.000	0	100.6	98.57	101.4	03/09/2023
pH	*	1.00		7.05	7.000	0	100.7	98.57	101.4	03/10/2023

### STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R325983 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	03/13/2023
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	03/13/2023

Batch R325983 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	03/13/2023
Total Dissolved Solids		20		922	1000	0	92.2	90	110	03/13/2023

Batch R325983 SampType: DUP Units mg/L

SampID: 23021699-001ADUP

RPD Limit: 5

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		296				308.0	3.97	03/13/2023

Batch R325983 SampType: DUP Units mg/L

SampID: 23021699-019ADUP

RPD Limit: 5

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		362				362.0	0.00	03/13/2023





## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

### STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R325983		SampType: DUP		Units mg/L			RPD Limit: 5			
SampID: 23021699-050ADUP										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		440				452.0	2.69	03/13/2023

Batch R325983		SampType: DUP		Units mg/L			RPD Limit: 5			
SampID: 23021699-058ADUP										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		894				904.0	1.11	03/13/2023

Batch R326043		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	03/14/2023
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	03/14/2023

Batch R326043		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		960	1000	0	96.0	90	110	03/14/2023
Total Dissolved Solids		20		962	1000	0	96.2	90	110	03/14/2023

Batch R326043		SampType: DUP		Units mg/L			RPD Limit: 5			
SampID: 23021699-007ADUP										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		630				612.0	2.90	03/14/2023

Batch R326043		SampType: DUP		Units mg/L			RPD Limit: 5			
SampID: 23021699-032ADUP										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		694				694.0	0.00	03/14/2023

Batch R326106		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	03/15/2023
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	03/15/2023
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	03/15/2023



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

### STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R326106		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Dissolved Solids		20		942	1000	0	94.2	90	110	03/15/2023	
Total Dissolved Solids		20		920	1000	0	92.0	90	110	03/15/2023	
Total Dissolved Solids		20	S	868	1000	0	86.8	90	110	03/15/2023	

Batch R326106		SampType: DUP		Units mg/L							RPD Limit: 5	Date Analyzed
SampID: 23021699-034ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Total Dissolved Solids		20		292				292.0	0.00	03/15/2023		

Batch R326106		SampType: DUP		Units mg/L							RPD Limit: 5	Date Analyzed
SampID: 23021699-061ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Total Dissolved Solids		50		4440				4455	0.34	03/15/2023		

Batch R326156		SampType: MBLK		Units mg/L							Date Analyzed
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	03/16/2023	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	03/16/2023	

Batch R326156		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Dissolved Solids		20		930	1000	0	93.0	90	110	03/16/2023	
Total Dissolved Solids		20		908	1000	0	90.8	90	110	03/16/2023	

Batch R326156		SampType: DUP		Units mg/L							RPD Limit: 5	Date Analyzed
SampID: 23021699-072ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Total Dissolved Solids		20		288				292.0	1.38	03/16/2023		

### SW-846 9036 (TOTAL)

Batch R326055		SampType: MBLK		Units mg/L							Date Analyzed
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	03/15/2023	



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

### SW-846 9036 (TOTAL)

Batch R326055		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		20	20.00	0	101.3	90	110	03/15/2023	

Batch R326055		SampType: MS		Units mg/L							
SampID: 23021699-011AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		20		74	40.00	28.15	113.9	85	115	03/15/2023	

Batch R326055		SampType: MSD		Units mg/L							
SampID: 23021699-011AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		20		73	40.00	28.15	113.3	73.71	0.31	03/15/2023	

Batch R326055		SampType: MS		Units mg/L							
SampID: 23021699-019AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		35	20.00	13.10	108.0	85	115	03/15/2023	

Batch R326055		SampType: MSD		Units mg/L							
SampID: 23021699-019AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		10		35	20.00	13.10	107.8	34.70	0.09	03/15/2023	

Batch R326055		SampType: MS		Units mg/L							
SampID: 23021699-020AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		33	20.00	10.05	114.6	85	115	03/15/2023	

Batch R326055		SampType: MSD		Units mg/L							
SampID: 23021699-020AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		10	S	33	20.00	10.05	115.7	32.98	0.63	03/15/2023	

Batch R326131		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	03/16/2023	



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

### SW-846 9036 (TOTAL)

Batch R326131		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		22	20.00	0	109.6	90	110	03/16/2023	

Batch R326131		SampType: MS		Units mg/L							
SampID: 23021699-039AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		41	20.00	19.51	107.3	85	115	03/16/2023	

Batch R326131		SampType: MSD		Units mg/L							
SampID: 23021699-039AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		10		41	20.00	19.51	109.3	40.97	0.95	03/16/2023	

Batch R326131		SampType: MS		Units mg/L							
SampID: 23021699-042AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		32	20.00	12.65	97.9	85	115	03/16/2023	

Batch R326131		SampType: MSD		Units mg/L							
SampID: 23021699-042AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		10		34	20.00	12.65	106.0	32.23	4.93	03/16/2023	

Batch R326131		SampType: MS		Units mg/L							
SampID: 23021699-048AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		31	20.00	10.04	106.6	85	115	03/16/2023	

Batch R326131		SampType: MSD		Units mg/L							
SampID: 23021699-048AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		10		30	20.00	10.04	101.2	31.37	3.54	03/16/2023	

Batch R326210		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	03/20/2023	



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

### SW-846 9036 (TOTAL)

Batch R326210		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		22	20.00	0	108.4	90	110	03/20/2023	

Batch R326210		SampType: MS		Units mg/L							
SampID: 23021699-056AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		100		371	200.0	156.0	107.3	85	115	03/20/2023	

Batch R326210		SampType: MSD		Units mg/L							
SampID: 23021699-056AMSD											
										RPD Limit: 10	
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		100		373	200.0	156.0	108.6	370.7	0.69	03/20/2023	

### SW-846 9214 (TOTAL)

Batch R325967		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	0.0370	0	0	-100	100	03/14/2023	

Batch R325967		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		0.94	1.000	0	94.4	90	110	03/14/2023	

Batch R325967		SampType: MS		Units mg/L							
SampID: 23021699-002AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.08	2.000	0.1950	94.2	75	125	03/14/2023	

Batch R325967		SampType: MSD		Units mg/L							
SampID: 23021699-002AMSD											
										RPD Limit: 15	
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.03	2.000	0.1950	91.9	2.080	2.29	03/14/2023	





## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

### SW-846 9214 (TOTAL)

Batch R325967		SampType: MS		Units mg/L							Date
SampID: 23021699-021AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Fluoride		0.10		2.23	2.000	0.3080	96.1	75	125		03/14/2023

Batch R325967		SampType: MSD		Units mg/L		RPD Limit: 15					Date
SampID: 23021699-021AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Fluoride		0.10		2.21	2.000	0.3080	95.2	2.230	0.86		03/14/2023

Batch R325967		SampType: MS		Units mg/L							Date
SampID: 23021699-023AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Fluoride		0.10		2.05	2.000	0.2180	91.6	75	125		03/14/2023

Batch R325967		SampType: MSD		Units mg/L		RPD Limit: 15					Date
SampID: 23021699-023AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Fluoride		0.10		2.09	2.000	0.2180	93.4	2.050	1.74		03/14/2023

Batch R325967		SampType: MS		Units mg/L							Date
SampID: 23021699-036AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Fluoride		0.10		2.05	2.000	0.2440	90.4	75	125		03/14/2023

Batch R325967		SampType: MSD		Units mg/L		RPD Limit: 15					Date
SampID: 23021699-036AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Fluoride		0.10		2.04	2.000	0.2440	89.6	2.052	0.83		03/14/2023

Batch R325967		SampType: MS		Units mg/L							Date
SampID: 23021699-048AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Fluoride		0.10		2.13	2.000	0.2180	95.7	75	125		03/14/2023

Batch R325967		SampType: MSD		Units mg/L		RPD Limit: 15					Date
SampID: 23021699-048AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Fluoride		0.10		2.13	2.000	0.2180	95.7	2.132	0.00		03/14/2023



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

### SW-846 9214 (TOTAL)

Batch R325967		SampType: MS		Units mg/L							Date Analyzed
SampID: 23021699-057AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		1.94	2.000	0.1660	88.6	75	125	03/14/2023	

Batch R325967		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23021699-057AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Fluoride		0.10		2.04	2.000	0.1660	93.5	1.938	4.93	03/14/2023		

Batch R325967		SampType: MS		Units mg/L							Date Analyzed
SampID: 23021699-067AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		1.99	2.000	0.1700	91.1	75	125	03/14/2023	

Batch R325967		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23021699-067AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Fluoride		0.10		2.03	2.000	0.1700	92.8	1.992	1.69	03/14/2023		

Batch R325967		SampType: MS		Units mg/L							Date Analyzed
SampID: 23021699-071AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		1.80	2.000	0	89.8	75	125	03/14/2023	

Batch R325967		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23021699-071AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Fluoride		0.10		1.78	2.000	0	89.0	1.796	0.84	03/14/2023		

Batch R325967		SampType: MS		Units mg/L							Date Analyzed
SampID: 23021699-072AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		1.99	2.000	0.2210	88.6	75	125	03/14/2023	

Batch R325967		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23021699-072AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Fluoride		0.10		2.05	2.000	0.2210	91.4	1.992	2.82	03/14/2023		



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

### SW-846 9251 (TOTAL)

Batch R326070		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	03/15/2023	

Batch R326070		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	98.2	90	110	03/15/2023	

Batch R326070		SampType: MS		Units mg/L							
SampID: 23021699-011AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		23	20.00	3.540	95.6	85	115	03/15/2023	

Batch R326070		SampType: MSD		Units mg/L							
SampID: 23021699-011AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		23	20.00	3.540	98.1	22.66	2.18	03/15/2023	

Batch R326070		SampType: MS		Units mg/L							
SampID: 23021699-019AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		41	20.00	22.94	90.7	85	115	03/15/2023	

Batch R326070		SampType: MSD		Units mg/L							
SampID: 23021699-019AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		41	20.00	22.94	89.6	41.08	0.54	03/15/2023	

Batch R326070		SampType: MS		Units mg/L							
SampID: 23021699-020AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		28	20.00	7.750	99.6	85	115	03/15/2023	

Batch R326070		SampType: MSD		Units mg/L							
SampID: 23021699-020AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		27	20.00	7.750	98.6	27.67	0.73	03/15/2023	



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

### SW-846 9251 (TOTAL)

Batch R326143		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	03/16/2023	

Batch R326143		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	99.4	90	110	03/16/2023	

Batch R326143		SampType: MS		Units mg/L							
SampID: 23021699-039AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		25	20.00	5.310	98.2	85	115	03/16/2023	

Batch R326143		SampType: MSD		Units mg/L							
SampID: 23021699-039AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		25	20.00	5.310	98.8	24.94	0.56	03/16/2023	

Batch R326143		SampType: MS		Units mg/L							
SampID: 23021699-042AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		27	20.00	7.470	98.6	85	115	03/16/2023	

Batch R326143		SampType: MSD		Units mg/L							
SampID: 23021699-042AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		27	20.00	7.470	97.0	27.20	1.18	03/16/2023	

Batch R326143		SampType: MS		Units mg/L							
SampID: 23021699-048AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		30	20.00	11.13	96.4	85	115	03/16/2023	

Batch R326143		SampType: MSD		Units mg/L							
SampID: 23021699-048AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		30	20.00	11.13	95.0	30.41	0.96	03/16/2023	



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

### SW-846 9251 (TOTAL)

Batch R326213		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		1		< 1	0.5000	0	0	-100	100	03/20/2023	

Batch R326213		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		1		20	20.00	0	100.0	90	110	03/20/2023	

Batch R326213		SampType: MS		Units mg/L							
SampID: 23021699-056AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		1		26	20.00	6.710	97.8	85	115	03/20/2023	

Batch R326213		SampType: MSD		Units mg/L							
SampID: 23021699-056AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		1		26	20.00	6.710	97.5	26.26	0.19	03/20/2023	

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

Batch 203823		SampType: MBLK		Units mg/L							
SampID: MBLK-203823											
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	03/14/2023	
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	03/14/2023	
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	03/14/2023	
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	03/14/2023	

Batch 203823		SampType: LCS		Units mg/L							
SampID: LCS-203823											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		2.45	2.500	0	98.1	85	115	03/14/2023	
Magnesium		0.0500		2.43	2.500	0	97.1	85	115	03/14/2023	
Potassium		0.100		2.38	2.500	0	95.3	85	115	03/14/2023	
Sodium		0.0500		2.18	2.500	0	87.0	85	115	03/14/2023	





## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

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

Batch 203823		SampType: MS		Units mg/L							Date Analyzed
SampID: 23021699-002BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		<b>39.8</b>	2.500	37.26	103.6	75	125	03/14/2023	
Magnesium		0.0500		<b>12.9</b>	2.500	10.30	102.8	75	125	03/14/2023	
Potassium		0.100		<b>3.49</b>	2.500	1.116	95.0	75	125	03/14/2023	
Sodium		0.0500		<b>30.8</b>	2.500	28.29	101.6	75	125	03/14/2023	

Batch 203823		SampType: MSD		Units mg/L							RPD Limit: 20	Date Analyzed
SampID: 23021699-002BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Calcium		0.100		<b>40.2</b>	2.500	37.26	117.6	39.85	0.87	03/14/2023		
Magnesium		0.0500		<b>13.0</b>	2.500	10.30	107.6	12.87	0.93	03/14/2023		
Potassium		0.100		<b>3.51</b>	2.500	1.116	95.7	3.490	0.51	03/14/2023		
Sodium		0.0500		<b>30.9</b>	2.500	28.29	104.4	30.83	0.23	03/14/2023		

Batch 203826		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-203826											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		<b>&lt; 0.100</b>	0.0350	0	0	-100	100	03/14/2023	
Magnesium		0.0500		<b>&lt; 0.0500</b>	0.0055	0	0	-100	100	03/14/2023	
Potassium		0.100		<b>&lt; 0.100</b>	0.0400	0	0	-100	100	03/14/2023	
Sodium		0.0500		<b>&lt; 0.0500</b>	0.0180	0	0	-100	100	03/14/2023	

Batch 203826		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-203826											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		<b>2.46</b>	2.500	0	98.3	85	115	03/14/2023	
Magnesium		0.0500		<b>2.35</b>	2.500	0	93.8	85	115	03/14/2023	
Potassium		0.100		<b>2.51</b>	2.500	0	100.6	85	115	03/14/2023	
Sodium		0.0500		<b>2.32</b>	2.500	0	92.8	85	115	03/14/2023	

Batch 203826		SampType: MS		Units mg/L							Date Analyzed
SampID: 23021699-016BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100	S	<b>78.8</b>	2.500	75.62	126.0	75	125	03/14/2023	
Magnesium		0.0500		<b>30.3</b>	2.500	27.82	99.8	75	125	03/14/2023	
Potassium		0.100		<b>3.60</b>	2.500	0.9525	105.8	75	125	03/14/2023	
Sodium		0.0500		<b>51.7</b>	2.500	48.72	118.8	75	125	03/14/2023	



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

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

Batch 203826		SampType: MSD		Units mg/L				RPD Limit: 20			
SampID: 23021699-016BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100	S	79.0	2.500	75.62	136.4	78.77	0.33	03/14/2023	
Magnesium		0.0500		30.4	2.500	27.82	104.2	30.31	0.36	03/14/2023	
Potassium		0.100		3.59	2.500	0.9525	105.5	3.597	0.19	03/14/2023	
Sodium		0.0500		51.6	2.500	48.72	116.0	51.69	0.14	03/14/2023	

Batch 203826		SampType: MS		Units mg/L				RPD Limit: 20			
SampID: 23021699-031BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		104	2.500	100.5	122.8	75	125	03/14/2023	
Magnesium		0.0500		28.9	2.500	26.46	96.7	75	125	03/14/2023	
Potassium		0.100		4.25	2.500	1.724	101.0	75	125	03/14/2023	
Sodium		0.0500		24.4	2.500	22.18	86.8	75	125	03/14/2023	

Batch 203826		SampType: MSD		Units mg/L				RPD Limit: 20			
SampID: 23021699-031BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100	S	106	2.500	100.5	208.8	103.6	2.05	03/14/2023	
Magnesium		0.0500	S	29.6	2.500	26.46	126.4	28.88	2.54	03/14/2023	
Potassium		0.100		4.26	2.500	1.724	101.4	4.249	0.21	03/14/2023	
Sodium		0.0500		24.8	2.500	22.18	103.6	24.35	1.71	03/14/2023	

Batch 203827		SampType: MBLK		Units mg/L				RPD Limit: 20			
SampID: MBLK-203827											
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	03/14/2023	
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	03/14/2023	
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	03/14/2023	
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	03/14/2023	

Batch 203827		SampType: LCS		Units mg/L				RPD Limit: 20			
SampID: LCS-203827											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		2.54	2.500	0	101.4	85	115	03/14/2023	
Magnesium		0.0500		2.41	2.500	0	96.4	85	115	03/14/2023	
Potassium		0.100		2.56	2.500	0	102.4	85	115	03/14/2023	
Sodium		0.0500		2.37	2.500	0	94.9	85	115	03/14/2023	



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

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

Batch 203827		SampType: MS		Units mg/L							
SampID: 23021699-042BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100	S	74.7	2.500	70.85	155.2	75	125	03/14/2023	
Magnesium		0.0500		19.6	2.500	17.04	100.9	75	125	03/14/2023	
Potassium		0.100		3.75	2.500	1.186	102.6	75	125	03/14/2023	
Sodium		0.0500		16.6	2.500	14.00	104.4	75	125	03/14/2023	

Batch 203827		SampType: MSD		Units mg/L							RPD Limit: 20	
SampID: 23021699-042BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Calcium		0.100		73.9	2.500	70.85	122.8	74.73	1.09	03/14/2023		
Magnesium		0.0500		19.6	2.500	17.04	100.9	19.56	0.01	03/14/2023		
Potassium		0.100		3.73	2.500	1.186	101.6	3.750	0.61	03/14/2023		
Sodium		0.0500		16.2	2.500	14.00	89.6	16.61	2.25	03/14/2023		

Batch 203827		SampType: MS		Units mg/L							
SampID: 23021699-056BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		67.7	2.500	65.71	80.8	75	125	03/14/2023	
Magnesium		0.0500		22.6	2.500	20.45	87.7	75	125	03/14/2023	
Potassium		0.100		3.55	2.500	0.8968	106.1	75	125	03/14/2023	
Sodium		0.0500		78.4	2.500	75.26	124.0	75	125	03/14/2023	

Batch 203827		SampType: MSD		Units mg/L							RPD Limit: 20	
SampID: 23021699-056BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Calcium		0.100	S	66.7	2.500	65.71	38.4	67.73	1.58	03/14/2023		
Magnesium		0.0500		22.3	2.500	20.45	75.2	22.65	1.38	03/14/2023		
Potassium		0.100		3.52	2.500	0.8968	104.9	3.550	0.92	03/14/2023		
Sodium		0.0500	S	76.5	2.500	75.26	48.4	78.36	2.44	03/14/2023		



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

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

Batch 203876		SampType: MBLK		Units mg/L						
SampID: MBLK-203876										
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	03/15/2023
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	04/03/2023
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	04/03/2023
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	03/15/2023
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	04/03/2023
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	03/15/2023
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	04/03/2023
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	03/15/2023

Batch 203876		SampType: LCS		Units mg/L						
SampID: LCS-203876										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		2.67	2.500	0	106.7	85	115	04/03/2023
Calcium		0.100		2.53	2.500	0	101.0	85	115	03/15/2023
Magnesium		0.0500		2.42	2.500	0	96.6	85	115	04/03/2023
Magnesium		0.0500		2.47	2.500	0	98.9	85	115	03/15/2023
Potassium		0.100		2.40	2.500	0	95.8	85	115	03/15/2023
Potassium		0.100		2.73	2.500	0	109.4	85	115	04/03/2023
Sodium		0.0500		2.27	2.500	0	90.7	85	115	03/15/2023
Sodium		0.0500		2.60	2.500	0	104.0	85	115	04/03/2023

Batch 203876		SampType: MS		Units mg/L						
SampID: 23021699-064BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	255	2.500	247.5	288.0	75	125	03/15/2023
Magnesium		0.0500		2.56	2.500	0.09860	98.6	75	125	03/15/2023
Potassium		1.00		15.5	2.500	13.14	96.0	75	125	03/17/2023
Sodium		0.0500		7.86	2.500	5.349	100.4	75	125	03/15/2023

Batch 203876		SampType: MSD		Units mg/L						
SampID: 23021699-064BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100	S	252	2.500	247.5	200.0	254.7	0.87	03/15/2023
Magnesium		0.0500		2.54	2.500	0.09860	97.5	2.564	1.06	03/15/2023
Potassium		1.00		15.6	2.500	13.14	97.6	15.54	0.26	03/17/2023
Sodium		0.0500		7.78	2.500	5.349	97.1	7.859	1.05	03/15/2023



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

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

Batch 203823		SampType: MBLK		Units mg/L						
SampID: MBLK-203823										
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	03/14/2023
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	03/14/2023
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	03/15/2023
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	03/14/2023
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	03/14/2023
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	03/14/2023
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	03/15/2023
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	03/14/2023
Iron		0.0250		< 0.0250	0.0115	0	0	-100	100	03/14/2023
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	03/14/2023
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	03/14/2023
Manganese		0.0020		< 0.0020	0.0008	0	0	-100	100	03/14/2023
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	03/14/2023
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	03/14/2023
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	03/14/2023

Batch 203823		SampType: LCS		Units mg/L						
SampID: LCS-203823										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.516	0.5000	0	103.1	80	120	03/14/2023
Arsenic		0.0010		0.534	0.5000	0	106.7	80	120	03/14/2023
Barium		0.0010		2.16	2.000	0	108.0	80	120	03/14/2023
Beryllium		0.0010		0.0529	0.0500	0	105.8	80	120	03/14/2023
Boron		0.0250		0.436	0.5000	0	87.2	80	120	03/18/2023
Cadmium		0.0010		0.0522	0.0500	0	104.4	80	120	03/14/2023
Chromium		0.0015		0.214	0.2000	0	107.0	80	120	03/14/2023
Cobalt		0.0010		0.531	0.5000	0	106.2	80	120	03/14/2023
Iron		0.0250		2.17	2.000	0	108.4	80	120	03/14/2023
Lead		0.0010		0.536	0.5000	0	107.2	80	120	03/14/2023
Lithium	*	0.0030		0.514	0.5000	0	102.9	80	120	03/15/2023
Manganese		0.0020		0.532	0.5000	0	106.5	80	120	03/14/2023
Molybdenum		0.0015		0.511	0.5000	0	102.2	80	120	03/14/2023
Selenium		0.0010		0.506	0.5000	0	101.1	80	120	03/14/2023
Thallium		0.0020		0.259	0.2500	0	103.4	80	120	03/14/2023





## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

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

Batch 203823		SampType: MS		Units mg/L							Date Analyzed
SampID: 23021699-002BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		<b>0.507</b>	0.5000	0	101.4	75	125	03/14/2023	
Arsenic		0.0010		<b>0.514</b>	0.5000	0	102.9	75	125	03/14/2023	
Barium		0.0010		<b>2.13</b>	2.000	0.1707	97.9	75	125	03/15/2023	
Beryllium		0.0010		<b>0.0527</b>	0.0500	0	105.4	75	125	03/14/2023	
Boron		0.0250		<b>0.608</b>	0.5000	0.02703	116.2	75	125	03/18/2023	
Cadmium		0.0010		<b>0.0490</b>	0.0500	0	98.0	75	125	03/14/2023	
Chromium		0.0015		<b>0.197</b>	0.2000	0	98.5	75	125	03/15/2023	
Cobalt		0.0010		<b>0.490</b>	0.5000	0	98.1	75	125	03/14/2023	
Lead		0.0010		<b>0.496</b>	0.5000	0	99.2	75	125	03/14/2023	
Lithium	*	0.0030		<b>0.513</b>	0.5000	0	102.5	75	125	03/15/2023	
Molybdenum		0.0015		<b>0.484</b>	0.5000	0	96.9	75	125	03/14/2023	
Selenium		0.0010		<b>0.465</b>	0.5000	0.001059	92.9	75	125	03/14/2023	
Thallium		0.0020		<b>0.242</b>	0.2500	0	97.0	75	125	03/14/2023	

Batch 203823		SampType: MSD		Units mg/L							RPD Limit: 20		Date Analyzed
SampID: 23021699-002BMSD													
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed			
Antimony		0.0010		<b>0.504</b>	0.5000	0	100.9	0.5072	0.55	03/14/2023			
Arsenic		0.0010		<b>0.544</b>	0.5000	0	108.9	0.5143	5.66	03/14/2023			
Barium		0.0010		<b>2.09</b>	2.000	0.1707	95.7	2.129	2.06	03/15/2023			
Beryllium		0.0010		<b>0.0524</b>	0.0500	0	104.8	0.05271	0.55	03/14/2023			
Boron		0.0250		<b>0.564</b>	0.5000	0.02703	107.4	0.6081	7.48	03/18/2023			
Cadmium		0.0010		<b>0.0491</b>	0.0500	0	98.1	0.04900	0.10	03/14/2023			
Chromium		0.0015		<b>0.192</b>	0.2000	0	96.1	0.1971	2.49	03/15/2023			
Cobalt		0.0010		<b>0.505</b>	0.5000	0	101.1	0.4905	3.01	03/14/2023			
Lead		0.0010		<b>0.511</b>	0.5000	0	102.1	0.4962	2.85	03/14/2023			
Lithium	*	0.0030		<b>0.496</b>	0.5000	0	99.2	0.5127	3.29	03/15/2023			
Molybdenum		0.0015		<b>0.494</b>	0.5000	0	98.8	0.4844	1.94	03/14/2023			
Selenium		0.0010		<b>0.492</b>	0.5000	0.001059	98.2	0.4655	5.56	03/14/2023			
Thallium		0.0020		<b>0.251</b>	0.2500	0	100.2	0.2424	3.33	03/14/2023			



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

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

Batch 203826		SampType: MBLK		Units mg/L							
SampID: MBLK-203826											
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	03/15/2023	
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	03/15/2023	
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	03/15/2023	
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	03/15/2023	
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	03/15/2023	
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	03/15/2023	
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	03/15/2023	
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	03/15/2023	
Iron		0.0250		< 0.0250	0.0115	0	0	-100	100	03/15/2023	
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	03/15/2023	
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	03/15/2023	
Manganese		0.0020		< 0.0020	0.0008	0	0	-100	100	03/15/2023	
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	03/15/2023	
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	03/15/2023	
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	03/15/2023	

Batch 203826		SampType: LCS		Units mg/L							
SampID: LCS-203826											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		0.471	0.5000	0	94.2	80	120	03/15/2023	
Arsenic		0.0010		0.495	0.5000	0	99.1	80	120	03/15/2023	
Barium		0.0010		2.11	2.000	0	105.6	80	120	03/15/2023	
Beryllium		0.0010		0.0453	0.0500	0	90.6	80	120	03/15/2023	
Boron		0.0250		0.457	0.5000	0	91.5	80	120	03/15/2023	
Cadmium		0.0010		0.0469	0.0500	0	93.8	80	120	03/15/2023	
Chromium		0.0015		0.208	0.2000	0	103.8	80	120	03/15/2023	
Cobalt		0.0010		0.491	0.5000	0	98.2	80	120	03/15/2023	
Iron		0.0250		1.78	2.000	0	89.0	80	120	03/15/2023	
Lead		0.0010		0.473	0.5000	0	94.6	80	120	03/15/2023	
Lithium	*	0.0030		0.468	0.5000	0	93.5	80	120	03/15/2023	
Manganese		0.0020		0.473	0.5000	0	94.5	80	120	03/15/2023	
Molybdenum		0.0015		0.465	0.5000	0	93.0	80	120	03/15/2023	
Selenium		0.0010		0.460	0.5000	0	92.0	80	120	03/15/2023	
Thallium		0.0020		0.211	0.2500	0	84.3	80	120	03/15/2023	



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

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

Batch 203826		SampType: MS		Units mg/L							Date Analyzed
SampID: 23021699-016BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		<b>0.509</b>	0.5000	0	101.8	75	125	03/15/2023	
Arsenic		0.0010		<b>0.509</b>	0.5000	0	101.8	75	125	03/15/2023	
Barium		0.0010		<b>2.27</b>	2.000	0.01459	112.5	75	125	03/15/2023	
Beryllium		0.0010		<b>0.0519</b>	0.0500	0	103.9	75	125	03/15/2023	
Boron		0.0250		<b>0.835</b>	0.5000	0.3269	101.6	75	125	03/15/2023	
Cadmium		0.0010		<b>0.0498</b>	0.0500	0	99.5	75	125	03/15/2023	
Chromium		0.0015		<b>0.206</b>	0.2000	0.0007895	102.6	75	125	03/15/2023	
Cobalt		0.0010		<b>0.462</b>	0.5000	0.0009652	92.2	75	125	03/15/2023	
Lead		0.0010		<b>0.510</b>	0.5000	0	102.0	75	125	03/15/2023	
Lithium	*	0.0030		<b>0.541</b>	0.5000	0.003563	107.5	75	125	03/15/2023	
Molybdenum		0.0015		<b>0.482</b>	0.5000	0	96.3	75	125	03/15/2023	
Selenium		0.0010		<b>0.472</b>	0.5000	0.003426	93.8	75	125	03/15/2023	
Thallium		0.0020		<b>0.231</b>	0.2500	0	92.6	75	125	03/15/2023	

Batch 203826		SampType: MSD		Units mg/L							RPD Limit: 20		Date Analyzed
SampID: 23021699-016BMSD													
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed			
Antimony		0.0010		<b>0.512</b>	0.5000	0	102.4	0.5089	0.63	03/15/2023			
Arsenic		0.0010		<b>0.523</b>	0.5000	0	104.6	0.5089	2.77	03/15/2023			
Barium		0.0010		<b>2.26</b>	2.000	0.01459	112.4	2.265	0.15	03/15/2023			
Beryllium		0.0010		<b>0.0518</b>	0.0500	0	103.6	0.05194	0.26	03/15/2023			
Boron		0.0250		<b>0.831</b>	0.5000	0.3269	100.9	0.8348	0.42	03/15/2023			
Cadmium		0.0010		<b>0.0497</b>	0.0500	0	99.3	0.04976	0.20	03/15/2023			
Chromium		0.0015		<b>0.218</b>	0.2000	0.0007895	108.6	0.2059	5.69	03/15/2023			
Cobalt		0.0010		<b>0.473</b>	0.5000	0.0009652	94.3	0.4618	2.32	03/15/2023			
Lead		0.0010		<b>0.509</b>	0.5000	0	101.9	0.5099	0.10	03/15/2023			
Lithium	*	0.0030		<b>0.535</b>	0.5000	0.003563	106.3	0.5408	1.06	03/15/2023			
Molybdenum		0.0015		<b>0.495</b>	0.5000	0	98.9	0.4817	2.67	03/15/2023			
Selenium		0.0010		<b>0.479</b>	0.5000	0.003426	95.1	0.4723	1.39	03/15/2023			
Thallium		0.0020		<b>0.238</b>	0.2500	0	95.2	0.2315	2.76	03/15/2023			



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

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

Batch 203826		SampType: MS		Units mg/L							Date Analyzed
SampID: 23021699-031BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		<b>0.496</b>	0.5000	0	99.2	75	125	03/15/2023	
Arsenic		0.0010		<b>0.522</b>	0.5000	0.001496	104.1	75	125	03/15/2023	
Barium		0.0010		<b>2.22</b>	2.000	0.04626	108.4	75	125	03/15/2023	
Beryllium		0.0010		<b>0.0505</b>	0.0500	0	101.0	75	125	03/15/2023	
Boron		0.0250	S	<b>7.08</b>	0.5000	7.383	-60.5	75	125	03/15/2023	
Cadmium		0.0010		<b>0.0486</b>	0.0500	0	97.3	75	125	03/15/2023	
Chromium		0.0015		<b>0.202</b>	0.2000	0	101.0	75	125	03/15/2023	
Cobalt		0.0010		<b>0.445</b>	0.5000	0.0002949	88.9	75	125	03/15/2023	
Lead		0.0010		<b>0.483</b>	0.5000	0	96.6	75	125	03/15/2023	
Lithium	*	0.0030		<b>0.523</b>	0.5000	0.001807	104.2	75	125	03/15/2023	
Molybdenum		0.0015		<b>0.503</b>	0.5000	0.001946	100.2	75	125	03/15/2023	
Selenium		0.0010		<b>0.478</b>	0.5000	0	95.7	75	125	03/15/2023	
Thallium		0.0020		<b>0.230</b>	0.2500	0	92.0	75	125	03/15/2023	

Batch 203826		SampType: MSD		Units mg/L							RPD Limit: 20	Date Analyzed
SampID: 23021699-031BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Antimony		0.0010		<b>0.476</b>	0.5000	0	95.3	0.4960	4.03	03/15/2023		
Arsenic		0.0010		<b>0.496</b>	0.5000	0.001496	99.0	0.5222	5.09	03/15/2023		
Barium		0.0010		<b>2.17</b>	2.000	0.04626	106.3	2.215	1.97	03/15/2023		
Beryllium		0.0010		<b>0.0487</b>	0.0500	0	97.4	0.05049	3.60	03/15/2023		
Boron		0.0250	S	<b>7.07</b>	0.5000	7.383	-62.8	7.081	0.16	03/15/2023		
Cadmium		0.0010		<b>0.0467</b>	0.0500	0	93.3	0.04863	4.11	03/15/2023		
Chromium		0.0015		<b>0.196</b>	0.2000	0	97.8	0.2021	3.27	03/15/2023		
Cobalt		0.0010		<b>0.422</b>	0.5000	0.0002949	84.3	0.4449	5.38	03/15/2023		
Lead		0.0010		<b>0.493</b>	0.5000	0	98.6	0.4830	2.03	03/15/2023		
Lithium	*	0.0030		<b>0.503</b>	0.5000	0.001807	100.2	0.5227	3.86	03/15/2023		
Molybdenum		0.0015		<b>0.510</b>	0.5000	0.001946	101.6	0.5029	1.43	03/15/2023		
Selenium		0.0010		<b>0.459</b>	0.5000	0	91.9	0.4785	4.08	03/15/2023		
Thallium		0.0020		<b>0.229</b>	0.2500	0	91.7	0.2300	0.31	03/15/2023		



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

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

Batch 203827		SampType: MBLK		Units mg/L							
SampID: MBLK-203827											
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	03/15/2023	
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	03/15/2023	
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	03/15/2023	
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	03/15/2023	
Boron		0.0250		< 0.0250	0.0150	0	0	-100	100	03/15/2023	
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	03/15/2023	
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	03/15/2023	
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	03/15/2023	
Iron		0.0250		< 0.0250	0.0115	0	0	-100	100	03/15/2023	
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	03/15/2023	
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	03/15/2023	
Manganese		0.0020		< 0.0020	0.0008	0	0	-100	100	03/15/2023	
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	03/15/2023	
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	03/15/2023	
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	03/15/2023	

Batch 203827		SampType: LCS		Units mg/L							
SampID: LCS-203827											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		0.496	0.5000	0	99.1	80	120	03/15/2023	
Arsenic		0.0010		0.502	0.5000	0	100.4	80	120	03/15/2023	
Barium		0.0010		2.28	2.000	0	113.9	80	120	03/15/2023	
Beryllium		0.0010		0.0501	0.0500	0	100.3	80	120	03/15/2023	
Boron		0.0250		0.519	0.5000	0	103.9	80	120	03/15/2023	
Cadmium		0.0010		0.0490	0.0500	0	98.1	80	120	03/15/2023	
Chromium		0.0015		0.212	0.2000	0	105.9	80	120	03/15/2023	
Cobalt		0.0010		0.464	0.5000	0	92.9	80	120	03/15/2023	
Iron		0.0250		1.82	2.000	0	90.9	80	120	03/15/2023	
Lead		0.0010		0.510	0.5000	0	102.1	80	120	03/15/2023	
Lithium	*	0.0030		0.518	0.5000	0	103.7	80	120	03/15/2023	
Manganese		0.0020		0.500	0.5000	0	100.0	80	120	03/15/2023	
Molybdenum		0.0015		0.485	0.5000	0	97.0	80	120	03/15/2023	
Selenium		0.0010		0.471	0.5000	0	94.1	80	120	03/15/2023	
Thallium		0.0020		0.226	0.2500	0	90.2	80	120	03/15/2023	





## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

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

Batch 203827		SampType: MS		Units mg/L							Date Analyzed
SampID: 23021699-042BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		0.511	0.5000	0	102.2	75	125	03/15/2023	
Arsenic		0.0010		0.511	0.5000	0.003986	101.5	75	125	03/15/2023	
Barium		0.0010		3.65	2.000	1.171	124.1	75	125	03/15/2023	
Beryllium		0.0010		0.0496	0.0500	0	99.2	75	125	03/15/2023	
Boron		0.0250		0.560	0.5000	0.09146	93.6	75	125	03/15/2023	
Cadmium		0.0010		0.0499	0.0500	0	99.7	75	125	03/15/2023	
Chromium		0.0015		0.214	0.2000	0	107.1	75	125	03/15/2023	
Cobalt		0.0010		0.513	0.5000	0.003415	101.9	75	125	03/15/2023	
Iron		0.0250		4.19	2.000	2.338	92.8	75	125	03/15/2023	
Lithium	*	0.0030		0.509	0.5000	0.003137	101.3	75	125	03/15/2023	
Manganese		0.0020		3.87	0.5000	3.314	111.0	75	125	03/15/2023	
Molybdenum		0.0015		0.495	0.5000	0.003366	98.4	75	125	03/15/2023	
Selenium		0.0010		0.457	0.5000	0	91.5	75	125	03/15/2023	
Thallium		0.0020		0.232	0.2500	0	92.6	75	125	03/15/2023	

Batch 203827		SampType: MSD		Units mg/L							RPD Limit: 20	Date Analyzed
SampID: 23021699-042BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Antimony		0.0010		0.493	0.5000	0	98.6	0.5112	3.58	03/15/2023		
Arsenic		0.0010		0.512	0.5000	0.003986	101.5	0.5113	0.04	03/15/2023		
Barium		0.0010		3.57	2.000	1.171	119.9	3.653	2.30	03/15/2023		
Beryllium		0.0010		0.0493	0.0500	0	98.7	0.04961	0.54	03/15/2023		
Boron		0.0250		0.570	0.5000	0.09146	95.7	0.5596	1.83	03/15/2023		
Cadmium		0.0010		0.0496	0.0500	0	99.2	0.04986	0.55	03/15/2023		
Chromium		0.0015		0.200	0.2000	0	100.1	0.2142	6.74	03/15/2023		
Cobalt		0.0010		0.490	0.5000	0.003415	97.4	0.5128	4.50	03/15/2023		
Iron		0.0250		3.96	2.000	2.338	81.1	4.193	5.73	03/15/2023		
Lithium	*	0.0030		0.498	0.5000	0.003137	99.0	0.5094	2.22	03/15/2023		
Manganese		0.0020		3.79	0.5000	3.314	94.2	3.869	2.20	03/15/2023		
Molybdenum		0.0015		0.481	0.5000	0.003366	95.6	0.4954	2.89	03/15/2023		
Selenium		0.0010		0.456	0.5000	0	91.3	0.4575	0.22	03/15/2023		
Thallium		0.0020		0.236	0.2500	0	94.3	0.2316	1.72	03/15/2023		



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

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

Batch 203827		SampType: MS		Units mg/L							
SampID: 23021699-056BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		<b>0.512</b>	0.5000	0	102.4	75	125	03/15/2023	
Arsenic		0.0010		<b>0.497</b>	0.5000	0.001119	99.3	75	125	03/15/2023	
Barium		0.0010		<b>2.44</b>	2.000	0.1494	114.4	75	125	03/15/2023	
Beryllium		0.0020		<b>0.0506</b>	0.0500	0	101.2	75	125	03/16/2023	
Boron		0.0500		<b>0.547</b>	0.5000	0.02291	104.9	75	125	03/16/2023	
Cadmium		0.0010		<b>0.0499</b>	0.0500	0	99.7	75	125	03/15/2023	
Chromium		0.0030		<b>0.199</b>	0.2000	0.002338	98.6	75	125	03/16/2023	
Cobalt		0.0020		<b>0.509</b>	0.5000	0.003590	101.1	75	125	03/16/2023	
Iron		0.0500		<b>4.84</b>	2.000	2.740	105.0	75	125	03/16/2023	
Lead		0.0010		<b>0.491</b>	0.5000	0.001024	98.1	75	125	03/15/2023	
Lithium	*	0.0060		<b>0.540</b>	0.5000	0	107.9	75	125	03/16/2023	
Manganese		0.0040		<b>1.76</b>	0.5000	1.295	92.0	75	125	03/16/2023	
Molybdenum		0.0015		<b>0.496</b>	0.5000	0.003114	98.5	75	125	03/15/2023	
Selenium		0.0010		<b>0.451</b>	0.5000	0	90.3	75	125	03/15/2023	
Thallium		0.0020		<b>0.223</b>	0.2500	0	89.3	75	125	03/15/2023	

Batch 203827		SampType: MSD		Units mg/L							
SampID: 23021699-056BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Antimony		0.0010		<b>0.502</b>	0.5000	0	100.4	0.5119	1.95	03/15/2023	
Arsenic		0.0010		<b>0.508</b>	0.5000	0.001119	101.3	0.4974	2.04	03/15/2023	
Barium		0.0010		<b>2.42</b>	2.000	0.1494	113.5	2.438	0.76	03/15/2023	
Beryllium		0.0020		<b>0.0524</b>	0.0500	0	104.8	0.05060	3.45	03/16/2023	
Boron		0.0500		<b>0.557</b>	0.5000	0.02291	106.9	0.5472	1.86	03/16/2023	
Cadmium		0.0010		<b>0.0495</b>	0.0500	0	99.0	0.04987	0.75	03/15/2023	
Chromium		0.0030		<b>0.201</b>	0.2000	0.002338	99.4	0.1995	0.85	03/16/2023	
Cobalt		0.0020		<b>0.515</b>	0.5000	0.003590	102.2	0.5092	1.06	03/16/2023	
Iron		0.0500		<b>5.07</b>	2.000	2.740	116.3	4.840	4.56	03/16/2023	
Lead		0.0010		<b>0.516</b>	0.5000	0.001024	103.0	0.4914	4.91	03/15/2023	
Lithium	*	0.0060		<b>0.551</b>	0.5000	0	110.2	0.5397	2.11	03/16/2023	
Manganese		0.0040		<b>1.79</b>	0.5000	1.295	99.8	1.755	2.20	03/16/2023	
Molybdenum		0.0015		<b>0.490</b>	0.5000	0.003114	97.4	0.4959	1.21	03/15/2023	
Selenium		0.0010		<b>0.461</b>	0.5000	0	92.2	0.4514	2.09	03/15/2023	
Thallium		0.0020		<b>0.238</b>	0.2500	0	95.2	0.2234	6.34	03/15/2023	



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

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

Batch 203876		SampType: MBLK		Units mg/L							
SampID: MBLK-203876											
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	03/16/2023	
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	03/16/2023	
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	03/16/2023	
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	03/16/2023	
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	03/16/2023	
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	03/16/2023	
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	03/16/2023	
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	03/16/2023	
Iron		0.0250		< 0.0250	0.0115	0	0	-100	100	03/16/2023	
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	03/16/2023	
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	03/16/2023	
Manganese		0.0020		< 0.0020	0.0008	0	0	-100	100	03/16/2023	
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	03/16/2023	
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	03/16/2023	
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	03/16/2023	

Batch 203876		SampType: LCS		Units mg/L							
SampID: LCS-203876											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		0.453	0.5000	0	90.6	80	120	03/16/2023	
Arsenic		0.0010		0.498	0.5000	0	99.7	80	120	03/16/2023	
Barium		0.0010		1.94	2.000	0	96.9	80	120	03/16/2023	
Beryllium		0.0010		0.0471	0.0500	0	94.2	80	120	03/16/2023	
Boron		0.0250		0.491	0.5000	0	98.2	80	120	03/16/2023	
Cadmium		0.0010		0.0459	0.0500	0	91.8	80	120	03/16/2023	
Chromium		0.0015		0.189	0.2000	0	94.5	80	120	03/16/2023	
Cobalt		0.0010		0.478	0.5000	0	95.5	80	120	03/16/2023	
Iron		0.0250		2.06	2.000	0	103.2	80	120	03/16/2023	
Lead		0.0010		0.482	0.5000	0	96.5	80	120	03/16/2023	
Lithium	*	0.0030		0.484	0.5000	0	96.9	80	120	03/16/2023	
Manganese		0.0020		0.474	0.5000	0	94.7	80	120	03/16/2023	
Molybdenum		0.0015		0.461	0.5000	0	92.3	80	120	03/16/2023	
Selenium		0.0010		0.472	0.5000	0	94.4	80	120	03/16/2023	
Thallium		0.0020		0.234	0.2500	0	93.6	80	120	03/16/2023	



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

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

Batch 203876		SampType: MS		Units mg/L							Date
SampID: 23021699-064BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Date Analyzed
Antimony		0.0010		0.471	0.5000	0.002769	93.6	75	125		03/16/2023
Arsenic		0.0010		0.528	0.5000	0.03604	98.5	75	125		03/16/2023
Barium		0.0010		1.98	2.000	0.06293	96.1	75	125		03/16/2023
Beryllium		0.0010		0.0495	0.0500	0	99.0	75	125		03/16/2023
Boron		0.0250	S	29.8	0.5000	34.28	-896.5	75	125		03/18/2023
Cadmium		0.0010		0.0466	0.0500	0	93.1	75	125		03/16/2023
Chromium		0.0015		0.190	0.2000	0	94.8	75	125		03/16/2023
Cobalt		0.0010		0.464	0.5000	0	92.8	75	125		03/16/2023
Iron		0.0250		2.10	2.000	0.1209	98.9	75	125		03/16/2023
Lead		0.0010		0.483	0.5000	0	96.7	75	125		03/16/2023
Lithium	*	0.0030		0.619	0.5000	0.1186	100.1	75	125		03/16/2023
Manganese		0.0020		0.478	0.5000	0.004777	94.7	75	125		03/16/2023
Molybdenum		0.0015		0.742	0.5000	0.2405	100.3	75	125		03/16/2023
Selenium		0.0010		0.540	0.5000	0.08217	91.6	75	125		03/16/2023
Thallium		0.0020		0.235	0.2500	0	94.0	75	125		03/16/2023

Batch 203876		SampType: MSD		Units mg/L		RPD Limit: 20					Date
SampID: 23021699-064BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Date Analyzed
Antimony		0.0010		0.447	0.5000	0.002769	88.9	0.4709	5.19		03/16/2023
Arsenic		0.0010		0.524	0.5000	0.03604	97.5	0.5284	0.94		03/16/2023
Barium		0.0010		1.90	2.000	0.06293	91.8	1.984	4.39		03/16/2023
Beryllium		0.0010		0.0487	0.0500	0	97.5	0.04951	1.59		03/16/2023
Boron		0.0250	S	29.0	0.5000	34.28	-1064	29.80	2.86		03/18/2023
Cadmium		0.0010		0.0446	0.0500	0	89.3	0.04656	4.21		03/16/2023
Chromium		0.0015		0.185	0.2000	0	92.5	0.1897	2.48		03/16/2023
Cobalt		0.0010		0.458	0.5000	0	91.7	0.4641	1.25		03/16/2023
Iron		0.0250		2.20	2.000	0.1209	103.9	2.098	4.68		03/16/2023
Lead		0.0010		0.480	0.5000	0	96.0	0.4834	0.73		03/16/2023
Lithium	*	0.0030		0.623	0.5000	0.1186	101.0	0.6192	0.68		03/16/2023
Manganese		0.0020		0.464	0.5000	0.004777	91.9	0.4784	2.96		03/16/2023
Molybdenum		0.0015		0.720	0.5000	0.2405	95.9	0.7419	3.01		03/16/2023
Selenium		0.0010		0.546	0.5000	0.08217	92.8	0.5400	1.10		03/16/2023
Thallium		0.0020		0.233	0.2500	0	93.2	0.2351	0.85		03/16/2023



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

### SW-846 7470A (TOTAL)

Batch 203832		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-203832											
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	03/14/2023	

Batch 203832		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-203832											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00456	0.0050	0	91.2	85	115	03/14/2023	

Batch 203832		SampType: MS		Units mg/L							Date Analyzed
SampID: 23021699-004BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00502	0.0050	0	100.4	75	125	03/14/2023	

Batch 203832		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23021699-004BMDS												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Mercury		0.00020		0.00513	0.0050	0	102.6	0.005021	2.13	03/14/2023		

Batch 203833		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-203833											
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	03/14/2023	

Batch 203833		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-203833											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00449	0.0050	0	89.8	85	115	03/14/2023	

Batch 203833		SampType: MS		Units mg/L							Date Analyzed
SampID: 23021699-025BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00461	0.0050	0.00009360	90.3	75	125	03/14/2023	

Batch 203833		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23021699-025BMDS												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Mercury		0.00020		0.00432	0.0050	0.00009360	84.6	0.004610	6.40	03/14/2023		





## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

### SW-846 7470A (TOTAL)

Batch 203833		SampType: MS		Units mg/L							Date Analyzed
SampID: 23021699-029BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00511</b>	0.0050	0	102.3	75	125	03/14/2023	

Batch 203833		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23021699-029BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Mercury		0.00020		<b>0.00502</b>	0.0050	0	100.3	0.005114	1.93	03/14/2023		

Batch 203843		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-203843											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>&lt; 0.00020</b>	0.0001	0	0	-100	100	03/14/2023	

Batch 203843		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-203843											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00504</b>	0.0050	0	100.7	85	115	03/14/2023	

Batch 203843		SampType: MS		Units mg/L							Date Analyzed
SampID: 23021699-053BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00497</b>	0.0050	0	99.5	75	125	03/14/2023	

Batch 203843		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23021699-053BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Mercury		0.00020		<b>0.00475</b>	0.0050	0	95.1	0.004974	4.53	03/14/2023		

Batch 203858		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-203858											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>&lt; 0.00020</b>	0.0001	0	0	-100	100	03/14/2023	

Batch 203858		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-203858											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00495</b>	0.0050	0	99.1	85	115	03/14/2023	



## Quality Control Results

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

Client: Vistra Energy

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

### SW-846 7470A (TOTAL)

Batch 203858		SampType: MS		Units mg/L						
SampID: 23021699-061BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		<b>0.00387</b>	0.0050	0	77.4	75	125	03/14/2023

Batch 203858		SampType: MSD		Units mg/L							RPD Limit: 15
SampID: 23021699-061BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020	S	<b>0.00365</b>	0.0050	0	73.1	0.003870	5.76	03/14/2023	

Batch 203858		SampType: MS		Units mg/L						
SampID: 23021699-072BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		<b>0.00498</b>	0.0050	0	99.6	75	125	03/14/2023

Batch 203858		SampType: MSD		Units mg/L							RPD Limit: 15
SampID: 23021699-072BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		<b>0.00510</b>	0.0050	0	102.1	0.004979	2.49	03/14/2023	



## Receiving Check List

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

Client: **Vistra Energy**

Work Order: 23021699

Client Project: JOP-23Q1

Report Date: 10-Apr-23

Carrier: Joe Riley

Received By: TWM

Completed by:

Reviewed by:

On:

On:

13-Mar-23

13-Mar-23

Lindsey Maddox

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

- |   |   |   |                                      |                                  |
|---|---|---|--------------------------------------|----------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/>             | Not Present <input type="checkbox"/> | Temp °C <b>2.4</b>               |
| Type of thermal preservation?                           | None <input type="checkbox"/>             | Ice <input checked="" type="checkbox"/> | Blue Ice <input type="checkbox"/>    | Dry Ice <input type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/>             |                                      |                                  |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/>             |                                      |                                  |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/>             |                                      |                                  |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/>             |                                      |                                  |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/>             |                                      |                                  |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/>             |                                      |                                  |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/>             |                                      |                                  |
| Reported field parameters measured:                     | Field <input checked="" type="checkbox"/> | Lab <input type="checkbox"/>            | NA <input type="checkbox"/>          |                                  |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/>             |                                      |                                  |

*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 <input type="checkbox"/> | No <input type="checkbox"/>            | No VOA vials <input checked="" type="checkbox"/>      |
| Water - TOX containers have zero headspace?               | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | No TOX containers <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt?                       | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | NA <input type="checkbox"/>                           |
| NPDES/CWA TCN interferences checked/treated in the field? | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | NA <input checked="" type="checkbox"/>                |

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

pH strip #87147. - lmaddox - 3/13/2023 10:07:47 AM

Additional Nitric Acid (87873) was needed in XTPW08 upon arrival at the laboratory. - lmaddox - 3/13/2023 10:07:49 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:

Company: <b>Vistra Corp</b>		Report To: <b>Brian Voelker</b>		Attention: <b>Jason Stuckey</b>	
Address: <b>13498 E. 900th St</b>		Copy To: <b>Jason Stuckey</b>		Company Name: <b>Vistra Corp</b>	
Email To: <b>Brian.Voelker@VistraCorp.com</b>		Purchase Order No.:		Address: <b>see Section A</b>	
Phone: <b>(217) 753-8911</b> Fax:		Project Name:		Quote Reference:	
Requested Due Date/TAT: <b>10 day</b>		Project Number: <b>2285</b>		Project Manager:	
				Profile #:	

REGULATORY AGENCY		
NPDES	GROUND WATER	DRINKING WATER
UST	RCRA	OTHER
Site Location		IL
STATE:		

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	COLLECTED DATE TIME	SAMPLE TEMP AT COLLECTION # OF CONTAINERS	Preservatives							Requested Analysis Filtered (Y/N)			Residual Chlorine (Y/N)	Project No./ Lab I.D.		
					Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Analysis Test ↓	JOP_257_401			JOP_257_402	JOP_845_403
1	G51D		3/9/23 0250	2											23021699-033			
2	G52D	100	03/10/23 0800	1											034			
3	G53D		3/9/23 1035	1											035			
4	G54D		3/9/23 0915	1											036			
5	G54S		3/7/23 1559	0											037			
6	SG02		3/11/23 1751	0											038			
7	TPZ114		3/11/23 0747	2											039			
8	TPZ115		3/8/23 1015	1											040			
9	TPZ115D		↓ 0636												041			
10	TPZ115DD		↓ 1058												042			
11	TPZ116		OKY												043			
12	TPZ117		↓												044			
13	TPZ117D		3/7/23 1251												045			
14	TPZ118		3/8/23 1221												046			
15	TPZ118D		↓ 1254												047			
16	TPZ118DD		↓ 1342												048			

ADDITIONAL COMMENTS	REQUISITIONED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
JOP-23Q1 Rev 1	<i>[Signature]</i>	3/10/23	0800	<i>[Signature]</i>	3-10-23	0800	

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>Justin Cap J. RILEY</i>				
SIGNATURE of SAMPLER:	<i>[Signature]</i>	DATE Signed (MM/DD/YY):	3-10-23		



# CHAIN-OF-CUSTODY / Analytical Request Document

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

ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

JOPPA POWER PLANT, EAST ASH POND

APPENDIX A.

JOP-287-489

Page: 5 of 5

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		<b>REGULATORY AGENCY</b>		
Company: <b>Vistra Corp</b>		Report To: <b>Brian Voelker</b>		Attention: <b>Jason Stuckey</b>		NPDES      GROUND WATER      DRINKING WATER UST          RCRA                  OTHER		
Address: <b>13498 E. 900th St</b>		Copy To: <b>Jason Stuckey</b>		Company Name: <b>Vistra Corp</b>				
Email To: <b>Brian.Voelker@VistraCorp.com</b>		Purchase Order No.:		Address: <b>see Section A</b>		Site Location STATE: <b>IL</b>		
Phone: <b>(217) 753-8911</b> Fax:		Project Name:		Quote Reference:				
Requested Due Date/TAT: <b>10 day</b>		Project Number: <b>2285</b>		Project Manager:				
				Profile #:				

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 <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> O <sub>2</sub>	Methanol		Other	JOP_257_401	JOP_257_402			JOP_845_403
1	XTPW02				3/8/23	1125		2													2307199-065	
2	XTPW03				3/7/23	1505															066	
3	XTPW04				3/8/23	0947															067	
4	XTPW06				3/10/23	0804															068	
5	XTPW07				3/10/23	0804															069	
6	XTPW08				3/10/23	1014															070	
7	FIELD BLANK				3/10/23	1730															071	
8	FIELD DUPLICATE				3/10/23	1100															072	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
JOP-23Q1 Rev 1	<i>[Signature]</i>	3/10/23	0800	<i>[Signature]</i>	3-10-23	0800	
PG and DW per history. 3/28/23		3/10/23	TE 900				

<b>SAMPLER NAME AND SIGNATURE</b>		Temp in °C	Received on Ice (Y/N)	Custody Sealed Container (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	<i>Justin Cole J. Riley</i>				
SIGNATURE of SAMPLER:	<i>[Signature]</i>	DATE Signed (MM/DD/YY):	3-10-23		

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/7/2023</u>				Time: <u>1017</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G01D</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	10:02		41.32												
	10:11	0.39	41.32	0	14.9	6.53	637	2.17	23.9	206.9					
	10:14	0.52	41.32	0	14.9	6.54	639	1.95	20.1	199.5					
	10:17	0.65	41.32	0	14.5	6.53	639	1.8	7.8	195.3					
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / No Color / No Odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential			
								FT BTOC - Feet Below Top of Casing na -				SEC - Specific Electrical Conductance			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION																
Site: <u>Joppa</u>		Client: <u>Vistra</u>														
Project Number: <u>23021699</u>		Task #: _____		Start Date: <u>3/07/2023</u>		Time: _____										
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/8/2023</u>		Time: _____		<u>1427</u>								
WELL INFORMATION				EVENT TYPE												
Well ID: <u>G02D</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>								
WATER QUALITY INDICATOR PARAMETERS (continued)																
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity					
	14:18		41.57													
	14:21	0.13	41.57	0	14.1	6.77	427.4	6.85	19.8	24.8						
	14:24	0.26	41.57	0	14.2	6.61	4243	6.1	4.7	38.8						
	14:27	0.39	41.57	0	14.2	6.56	4224	5.78	5.9	49.1						
NOTES (continued)							ABBREVIATIONS									
Bladder Pump / Clear / No Color / No Odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential SEC - Specific Electrical				
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units				



**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION																
Site: <u>Joppa</u>		Client: <u>Vistra</u>														
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:										
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/9/2023</u>				Time: <u>0718</u>								
WELL INFORMATION				EVENT TYPE												
Well ID: <u>G03</u>				Well Development				Low-Flow / Low Stress Sampling								
				Well Volume Approach Sampling				Other (Specify): <u>Low Flow</u>								
WATER QUALITY INDICATOR PARAMETERS (continued)																
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity					
	6:38		36.41													
	7:11	1.43	36.41	0	15.3	6.22	672	4.52	119.6	167.6						
	7:14	1.56	36.41	0	15.4	6.23	668	4.46	104.2	165.6						
	7:18	1.69	36.41	0	15.4	6.23	665	4.46	107.3	164.6						
NOTES (continued)							ABBREVIATIONS									
Bladder Pump / Cloudy / Lt. Brown / No odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential SEC - Specific Electrical				
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units				

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/9/2023</u>				Time: <u>1105</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G05</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	10:53		41.05												
	10:56	0.13	41.05	0	15.2	6.55	698	6.88	37.1	47					
	10:59	0.26	41.05	0	14.7	6.5	702	5.01	27.1	26.6					
	11:02	0.39	41.05	0	14	6.5	700	4.85	40.7	46.1					
	11:05	0.52	41.05	0	13.9	6.5	699	4.95	38.6	47.4					
NOTES (continued)							ABBREVIATIONS								
Bladder Pump / Clear / No Color / No odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential		SEC - Specific Electrical	
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units			



**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>				Time:							
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/9/2023</u>				Time: _____							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G07</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	12:01		36.24												
	12:19	0.78	36.24	0	15	6.41	1070	0.88	391	112.1					
	12:22	0.91	36.24	0	15	6.41	1073	0.83	280.1	112.3					
	12:25	1.04	36.24	0	15	6.42	1075	0.78	193.9	112.4					
	12:28	1.17	36.24	0	15	6.42	1077	0.76	201.3	112.5					
NOTES (continued)							ABBREVIATIONS								
Bladder Pump / Cloudy / Lt. Brown / No odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential		SEC - Specific Electrical	
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION											
Site: <u>Joppa</u>		Client: <u>Vistra</u>									
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>				Time:			
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/9/2023</u>				Time: <u>1018</u>			
WELL INFORMATION				EVENT TYPE							
Well ID: <u>G08</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>			
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
	<u>9:57</u>		<u>25.82</u>								
	<u>10:12</u>	<u>0.65</u>	<u>25.82</u>	<u>0</u>	<u>15.4</u>	<u>6.85</u>	<u>1038</u>	<u>1.01</u>	<u>55.9</u>	<u>-50.6</u>	
	<u>10:15</u>	<u>0.78</u>	<u>25.82</u>	<u>0</u>	<u>15.4</u>	<u>6.85</u>	<u>1043</u>	<u>0.93</u>	<u>40.9</u>	<u>-51.2</u>	
	<u>10:18</u>	<u>0.91</u>	<u>25.82</u>	<u>0</u>	<u>15.4</u>	<u>6.85</u>	<u>1047</u>	<u>0.9</u>	<u>48.7</u>	<u>-51.6</u>	
NOTES (continued)								ABBREVIATIONS			
Bladder Pump / Clear / No Color / No odor								Cond. - Actual Conductivity      ORP - Oxidation-Reduction Potential SEC - Specific Electrical			
								FT BTOC - Feet Below Top of Casing na - Conductance SU - Standard Units			





**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/8/2023</u>				Time: <u>1710</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G10</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	16:43		33.78												
	17:01	0.78	33.78	0	16	6.55	1263	0.91	101.6	8.6					
	17:04	0.91	33.78	0	15.9	6.55	1252	0.86	63.3	9.9					
	17:07	1.04	33.78	0	15.9	6.55	1242	0.82	55.8	10.8					
	17:10	1.17	33.78	0	15.9	6.55	1231	0.79	51.5	11.6					
NOTES (continued)							ABBREVIATIONS								
Bladder Pump / Clear / No Color / Strong odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential		SEC - Specific Electrical	
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/7/2023</u>				Time: <u>0947</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G101</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	9:09		39.73												
	9:39	1.3	44.1	4.37	15.2	6.6	569	7.88	0.1	99.8					
	9:42	1.43	44.1	0	15.1	6.58	569	7.77	0	98.9					
	9:47	1.56	44.1	0	15.3	6.58	568	7.69	0	99.4					
NOTES (continued)							ABBREVIATIONS								
Bladder Pump / Clear / No Color / No Odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential		SEC - Specific Electrical	
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/10/2023</u>				Time: <u>1156</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G102LF</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	11:32		58.05												
	11:50	0.65	62.6	4.55	15.4	6.34	445.9	7.1	54.3	107.5					
	11:53	0.78	63.7	0.1	15.4	6.32	439.2	7.04	42.1	109.8					
	11:56	0.91	63.7	0	15.4	6.31	438.6	6.97	49.2	112.1					
NOTES (continued)							ABBREVIATIONS								
Bladder Pump / Clear / No Color / No odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential		SEC - Specific Electrical	
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/10/2023</u>				Time: <u>1217</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G105LF</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	12:05		54.78												
	12:11	0.26	54.78	0	16.2	6.04	536	8.1	12.1	127.8					
	12:14	0.39	54.78	0	16.2	6.03	517	7.95	4.8	138.4					
	12:17	0.52	54.78	0	16.3	6.03	510	7.94	2.9	145.7					
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / No Color / No odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential			
								FT BTOC - Feet Below Top of Casing				SEC - Specific Electrical Conductance			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION																
Site: <u>Joppa</u>		Client: <u>Vistra</u>														
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>				Time:								
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/10/2023</u>				Time: <u>1239</u>								
WELL INFORMATION				EVENT TYPE												
Well ID: <u>G107LF</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>								
WATER QUALITY INDICATOR PARAMETERS (continued)																
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity					
	12:24		52.15													
	12:30	0.26	54.82	2.67	16.1	6.4	1134	4.42	31.5	122.3						
	12:33	0.39	55.42	0.6	16	6.4	1133	4.04	26.8	124.1						
	12:36	0.52	55.42	0	16	6.41	1132	3.93	28.6	125.4						
	12:39	0.65	55.42	0	15.9	6.42	1129	4.1	24.6	126.5						
NOTES (continued)							ABBREVIATIONS									
Bladder Pump / Clear / No Color / No odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential SEC - Specific Electrical				
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units				



**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/10/2023</u>				Time: <u>1308</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G109LF</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	12:47		50.42												
	12:59	0.52	53.22	2.8	15.9	6.33	526	5.46	26.2	129.9					
	13:02	0.65	53.8	0.58	15.8	6.33	526	5.36	30.2	131.5					
	13:05	0.78	53.8	0	15.9	6.32	524	5.21	30.4	134.1					
	13:08	0.91	53.8	0	16.1	6.32	524	5.18	29.8	134.9					
NOTES (continued)							ABBREVIATIONS								
Bladder Pump / Clear / No Color / No odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential		SEC - Specific Electrical	
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION																
Site: <u>Joppa</u>		Client: <u>Vistra</u>														
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:										
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/8/2023</u>				Time: <u>1547</u>								
WELL INFORMATION				EVENT TYPE												
Well ID: <u>G11</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>								
WATER QUALITY INDICATOR PARAMETERS (continued)																
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity					
	15:23		44.26													
	15:26	0.13	44.26	0	16	5.81	1204	3.28	19.4	142.2						
	15:29	0.26	44.26	0	15.6	5.81	1183	2.17	25.7	153.2						
	15:32	0.39	44.26	0	15.9	5.82	1104	1.75	136	157.2						
	15:35	0.52	44.26	0	15.9	5.84	1016	1.44	138.2	160.4						
	15:38	0.65	44.26	0	15.9	5.85	970	1.3	88.5	162.4						
	15:41	0.78	44.26	0	16	5.86	943	1.21	68.2	164						
	15:44	0.91	44.26	0	16	5.87	911	1.16	55.8	165.2						
	15:47	1.04	44.26	0	16	5.87	902	1.13	49.3	166.3						
NOTES (continued)							ABBREVIATIONS									
Bladder Pump / Clear / No Color / No Odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential SEC - Specific Electrical				
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units				

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/7/2023</u>				Time: <u>1603</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G111</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	15:51		4.78												
	15:54	0.13	4.78	0	14.3	7.13	690	6.5	21.2	35.5					
	15:57	0.26	4.78	0	14.6	7.05	690	5.3	24.8	41					
	16:00	0.39	4.78	0	14.6	7.05	690	5.27	16.4	45.5					
	16:03	0.52	4.78	0	14.7	7.05	690	5.21	4.2	49.1					
NOTES (continued)							ABBREVIATIONS								
Bladder Pump / Clear / No Color / No Odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential		SEC - Specific Electrical	
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/8/2023</u>				Time: <u>813</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G112C</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	8:01		5.1												
	8:07	0.26	5.1	0	13.2	6.44	1645	1.4	18.9	180.7					
	8:10	0.39	5.1	0	13.2	6.42	1646	1.35	18.7	180.9					
	8:13	0.52	5.1	0	13	6.41	1644	1.21	9.87	180.6					
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / No Color / No Odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential SEC - Specific Electrical			
								FT BTOC - Feet Below Top of Casing na -				Conductance SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/8/2023</u>				Time: <u>833</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G112D</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	8:24		8.38												
	8:27	0.13	8.38	0	14.3	6.65	684	3.61	8	166.5					
	8:30	0.26	8.38	0	14.3	6.63	687	2	3.1	110.5					
	8:33	0.39	8.38	0	14.4	6.62	681	1.42	1.4	64.6					
NOTES (continued)							ABBREVIATIONS								
Bladder Pump / Clear / No Color / No Odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential		SEC - Specific Electrical	
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units			







**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>				Time:							
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/9/2023</u>				Time: <u>1307</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G012D</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	12:58		42.63												
	13:01	0.13	42.63	0	14.5	6.65	815	4.87	7.1	108.6					
	13:04	0.26	42.63	0	14.6	6.62	817	1.76	15.9	108.6					
	13:07	0.39	42.63	0	14.6	6.62	817	1.29	8.2	107.9					
NOTES (continued)							ABBREVIATIONS								
Bladder Pump / Clear / No Color / No odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential		SEC - Specific Electrical	
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/9/2023</u>				Time: <u>1253</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G012S</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	12:35		42.3												
	12:44	0.39	42.3	0	14.6	6.54	806	1.52	76.5	107					
	12:47	0.52	42.3	0	14.6	6.54	805	1.21	39.4	107.1					
	12:50	0.65	42.3	0	14.6	6.54	804	1.08	32.1	107.2					
	12:53	0.78	42.3	0	14.6	6.55	804	1	5.8	107.3					
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / No Color / No odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential SEC - Specific Electrical			
								FT BTOC - Feet Below Top of Casing na -				Conductance SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION														
Site: <u>Joppa</u>		Client: <u>Vistra</u>												
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:								
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/9/2023</u>				Time: <u>1337</u>						
WELL INFORMATION				EVENT TYPE										
Well ID: <u>G013D</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>						
WATER QUALITY INDICATOR PARAMETERS (continued)														
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity			
	13:28		37.12											
	13:31	0.13	37.12	0	14.3	6.65	776	4.87	1.1	111.8				
	13:34	0.26	37.12	0	14.3	6.62	777	2.04	0.4	113.7				
	13:37	0.39	37.12	0	14.3	6.61	777	1.69	0	115				
NOTES (continued)							ABBREVIATIONS							
Bladder Pump / Clear / No Color / No odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential		SEC - Specific Electrical
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units		

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>			Time:								
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/9/2023</u>				Time: <u>1325</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G013S</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	13:16		37.33												
	13:19	0.13	37.33	0	14.3	6.6	777	3.65	1.9	112.1					
	13:22	0.26	37.33	0	14.3	6.57	777	2.07	2.1	113					
	13:25	0.39	37.33	0	14.3	6.56	777	1.51	2.2	112.9					
NOTES (continued)							ABBREVIATIONS								
Bladder Pump / Clear / No Color / No odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential		SEC - Specific Electrical	
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units			





**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/10/2023</u>				Time: <u>0857</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: G014S				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): Low Flow							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	8:48		27.69												
	8:51	0.13	27.69	0	13.8	6.6	879	3.83	7.7	44.4					
	8:54	0.26	27.69	0	13.8	6.56	880	2.49	8.4	56.8					
	8:57	0.39	27.69	0	13.8	6.55	880	2.31	8.1	59.7					
NOTES (continued)							ABBREVIATIONS								
Bladder Pump / Clear / No Color / No odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential		SEC - Specific Electrical	
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>				Time:							
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/9/2023</u>				Time: _____							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G151</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	<u>15:50</u>		<u>34.31</u>												
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / No Color / No odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential SEC - Specific Electrical			
								FT BTOC - Feet Below Top of Casing na -				Conductance SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/9/2023</u>				Time: <u>1501</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: G015D				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): Low Flow							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	14:46		29.28												
	14:52	0.26	29.28	0	14.2	6.71	1188	1.28	174.2	-18.3					
	14:55	0.39	29.28	0	14.1	6.72	1184	1.1	120.4	-21.6					
	14:58	0.52	29.28	0	14.1	6.73	1189	0.99	65.8	-24.7					
	15:01	0.65	29.28	0	14.2	6.73	1182	0.88	70.1	-28.4					
NOTES (continued)							ABBREVIATIONS								
Bladder Pump / Cloudy / Lt. Brown / No odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential		SEC - Specific Electrical	
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/9/2023</u>				Time: <u>1442</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G015S</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	14:15		29.25												
	14:36	0.91	29.25	0	14.2	6.19	548	2.02	33.2	120.1					
	14:39	1.04	29.25	0	14.2	6.19	548	1.98	22.1	124.9					
	14:42	1.17	29.25	0	14.2	6.19	548	1.96	9.8	127.1					
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / No Color / No odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential			
								FT BTOC - Feet Below Top of Casing				SEC - Specific Electrical Conductance			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>				Time:							
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/9/2023</u>				Time: <u>1407</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G016D</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	13:58		33.93												
	14:01	0.13	33.93	0	14.3	6.76	866	4.79	9.5	-32.5					
	14:04	0.26	33.93	0	14.3	6.75	870	2.01	3.8	-63.6					
	14:07	0.39	33.93	0	14.3	6.75	864	1.37	0	-72.8					
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / No Color / Moderate odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential			
								FT BTOC - Feet Below Top of Casing na -				SEC - Specific Electrical Conductance SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/9/2023</u>				Time: <u>1355</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: G016S				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): Low Flow							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	13:46		33.91												
	13:49	0.13	33.91	0	14.2	6.68	1142	3.89	6.8	124.8					
	13:52	0.26	33.91	0	14.2	6.67	1142	2.3	17.1	120.7					
	13:55	0.39	33.91	0	14.3	6.67	1142	1.55	9.6	115.8					
NOTES (continued)							ABBREVIATIONS								
Bladder Pump / Clear / No Color / No odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential		SEC - Specific Electrical	
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units			



**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/8/2023</u>				Time: <u>1508</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: G51D				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): Low Flow							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	14:59		41.63												
	15:02	0.13	41.63	0	15.9	5.88	447.8	5.82	34	97.7					
	15:05	0.26	41.63	0	15.9	5.51	448.4	3.02	2.9	151.1					
	15:08	0.39	41.63	0	15.9	5.49	449.1	2.58	3	166.5					
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / No Color / No Odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential			
								FT BTOC - Feet Below Top of Casing na -				SEC - Specific Electrical Conductance SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/10/2023</u>				Time: <u>1100</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G52D</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	10:48		28												
	10:54		29.3	1.3	14.7	6.56	604	3.43	26.3	-21.8					
	10:57		29.3	0	14.8	6.48	604	7.64	15.4	16.3					
	11:00		29.3	0	14.8	6.54	604	10.09	8.9	26.7					
NOTES (continued)							ABBREVIATIONS								
Bladder Pump / Clear / No Color / No odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential		SEC - Specific Electrical	
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/9/2023</u>				Time: <u>1038</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G53D</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	10:29		35.35												
	10:32	0.13	35.35	0	15.5	6.54	624	3.74	8.5	-2.7					
	10:35	0.26	35.35	0	15.6	6.48	628	2.42	4.8	2.6					
	10:38	0.39	35.35	0	15.7	6.46	626	2.03	4.2	3.6					
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / No Color / No odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential			
								SEC - Specific Electrical Conductance				SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/9/2023</u>				Time: <u>915</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: G54D				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): Low Flow							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	9:00		35.99												
	9:09	0.39	35.99	0	15.1	6.53	1026	2	96.1	12.8					
	9:12	0.52	35.99	0	15.2	6.52	1018	1.55	78.6	4.1					
	9:15	0.65	35.99	0	15.2	6.52	1017	1.14	84.9	1.5					
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / No Color / Slight odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential			
								SEC - Specific Electrical Conductance				SU - Standard Units			
								FT BTOC - Feet Below Top of Casing na -							

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION																
Site: <u>Joppa</u>		Client: <u>Vistra</u>														
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>				Time:								
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/10/2023</u>				Time: <u>0743</u>								
WELL INFORMATION				EVENT TYPE												
Well ID: <u>TPZ114</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>								
WATER QUALITY INDICATOR PARAMETERS (continued)																
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity					
	<u>7:34</u>		<u>20.21</u>													
	<u>7:37</u>	<u>0.13</u>	<u>27.9</u>	<u>7.69</u>	<u>14.6</u>	<u>6.2</u>	<u>353.6</u>	<u>5.43</u>	<u>61.6</u>	<u>74.6</u>						
	<u>7:40</u>	<u>0.26</u>	<u>30.46</u>	<u>2.56</u>	<u>14.4</u>	<u>6.16</u>	<u>349.1</u>	<u>5.7</u>	<u>38.3</u>	<u>87</u>						
	<u>7:43</u>	<u>0.39</u>	<u>31.52</u>	<u>1.06</u>	<u>14.2</u>	<u>6.15</u>	<u>348.8</u>	<u>5.77</u>	<u>8.5</u>	<u>91.3</u>						
NOTES (continued)							ABBREVIATIONS									
Bladder Pump / Cloudy / Lt. Brown / No odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential SEC - Specific Electrical				
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units				





**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>				Time:							
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/8/2023</u>				Time: <u>1036</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>TPZ115D</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	10:27		7.25												
	10:30	0.13	7.25	0	13.6	7.03	703	3.31	17.7	-95.8					
	10:33	0.26	7.25	0	13.7	7.09	704	1.66	6.7	-131.6					
	10:36	0.39	7.25	0	13.8	7.11	704	1.26	2.3	-142.9					
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / No Color / No Odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential SEC - Specific Electrical			
								FT BTOC - Feet Below Top of Casing na -				Conductance SU - Standard Units			



**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION																
Site: <u>Joppa</u>		Client: <u>Vistra</u>														
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:										
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/7/2023</u>				Time: <u>1251</u>								
WELL INFORMATION				EVENT TYPE												
Well ID: <u>TPZ117D</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>								
WATER QUALITY INDICATOR PARAMETERS (continued)																
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity					
	12:27		31.51													
	12:30	0.13	31.51	0	15.8	6.66	924	4.18	64.7	64.9						
	12:33	0.26	31.51	0	15.8	6.57	923	2.09	66.4	74						
	12:36	0.39	31.51	0	15.8	6.56	917	1.62	55	80.6						
	12:39	0.52	31.51	0	15.8	6.55	916	1.48	49.3	84.3						
	12:42	0.65	31.51	0	15.7	6.55	912	1.36	36.3	88.5						
	12:45	0.78	31.51	0	15.7	6.54	911	1.28	28.5	92						
	12:48	0.91	31.51	0	15.7	6.54	909	1.23	27	94.6						
	12:51	1.04	31.51	0	15.7	6.54	908	1.2	33.9	96.5						
NOTES (continued)							ABBREVIATIONS									
Bladder Pump / Clear / No Color / No Odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential SEC - Specific Electrical				
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units				



**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>				Time:							
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/8/2023</u>				Time: <u>1254</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>TPZ118D</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	12:33		24.72												
	12:45	0.52	24.72	0	14.8	6.28	1069	1.23	22.8	10.3					
	12:48	0.65	24.72	0	14.7	6.28	1068	1.05	14.5	9.1					
	12:51	0.78	24.72	0	14.8	6.28	1068	0.94	10.2	8					
	12:54	0.91	24.72	0	14.8	6.28	1067	0.87	9.5	7.3					
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / No Color / No Odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential			
								SEC - Specific Electrical Conductance				SU - Standard Units			





**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION											
Site: <u>Joppa</u>		Client: <u>Vistra</u>									
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>				Time:			
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/7/2023</u>				Time: <u>1144</u>			
WELL INFORMATION				EVENT TYPE							
Well ID: <u>TPZ119D</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>			
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
	<u>11:35</u>		<u>34.1</u>								
	<u>11:38</u>	<u>0.13</u>	<u>34.1</u>	<u>0</u>	<u>14.9</u>	<u>6.41</u>	<u>725</u>	<u>4.32</u>	<u>18.1</u>	<u>94.8</u>	
	<u>11:41</u>	<u>0.26</u>	<u>34.1</u>	<u>0</u>	<u>14.9</u>	<u>6.36</u>	<u>750</u>	<u>3.21</u>	<u>9.2</u>	<u>100.2</u>	
	<u>11:44</u>	<u>0.39</u>	<u>34.1</u>	<u>0</u>	<u>14.9</u>	<u>6.34</u>	<u>768</u>	<u>2.75</u>	<u>9.8</u>	<u>104.2</u>	
NOTES (continued)							ABBREVIATIONS				
Bladder Pump / Clear / No Color / No Odor							Cond. - Actual Conductivity      ORP - Oxidation-Reduction Potential SEC - Specific Electrical				
							FT BTOC - Feet Below Top of Casing na - Conductance SU - Standard Units				

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION											
Site: <u>Joppa</u>		Client: <u>Vistra</u>									
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>				Time:			
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/7/2023</u>				Time: <u>1209</u>			
WELL INFORMATION				EVENT TYPE							
Well ID: <u>TPZ119DD</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>			
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
	11:54		34.1								
	11:57	0.13	34.1	0	14.7	6.69	1781	4.4	76.4	68.6	
	12:00	0.26	34.1	0	14.7	6.74	1810	1.66	55	32.1	
	12:03	0.39	34.1	0	14.7	6.75	1798	1.22	41.5	17.8	
	12:06	0.52	34.1	0	14.6	6.76	1784	0.98	25.8	7.2	
	12:09	0.65	34.1	0	14.6	6.76	1778	0.87	7.8	2	
NOTES (continued)							ABBREVIATIONS				
Bladder Pump / Clear / No Color / No Odor							Cond. - Actual Conductivity      ORP - Oxidation-Reduction Potential SEC - Specific Electrical FT BTOC - Feet Below Top of Casing na - Conductance SU - Standard Units				



**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION											
Site: <u>Joppa</u>		Client: <u>Vistra</u>									
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:					
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/7/2023</u>		Time: <u>1352</u>					
WELL INFORMATION				EVENT TYPE							
Well ID: <u>TPZ120D</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>			
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
	<u>13:40</u>		<u>44.38</u>								
	<u>13:43</u>	<u>0.13</u>	<u>44.38</u>	<u>0</u>	<u>14.9</u>	<u>6.28</u>	<u>1829</u>	<u>4.33</u>	<u>25.9</u>	<u>104.7</u>	
	<u>13:46</u>	<u>0.26</u>	<u>44.38</u>	<u>0</u>	<u>14.9</u>	<u>6.2</u>	<u>1840</u>	<u>1.83</u>	<u>17.4</u>	<u>91.3</u>	
	<u>13:49</u>	<u>0.39</u>	<u>44.38</u>	<u>0</u>	<u>14.9</u>	<u>6.2</u>	<u>1832</u>	<u>1.53</u>	<u>19.2</u>	<u>87.7</u>	
	<u>13:52</u>	<u>0.52</u>	<u>44.38</u>	<u>0</u>	<u>14.9</u>	<u>6.2</u>	<u>1822</u>	<u>1.26</u>	<u>24.7</u>	<u>83.1</u>	
NOTES (continued)							ABBREVIATIONS				
Bladder Pump / Clear / No Color / No Odor							Cond. - Actual Conductivity      ORP - Oxidation-Reduction Potential SEC - Specific Electrical				
							FT BTOC - Feet Below Top of Casing na - Conductance SU - Standard Units				

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/7/2023</u>				Time: <u>1708</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>TPZ122</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	16:44		43.34												
	16:59	0.65	43.34	0	14.4	6.76	942	1.66	67.8	-32.4					
	17:02	0.78	43.34	0	14.4	6.76	941	1.57	54	-34.2					
	17:05	0.91	43.34	0	14.4	6.76	940	1.47	50.3	-35.4					
	17:08	1.04	43.34	0	14.4	6.77	939	1.47	50.6	-36.2					
NOTES (continued)							ABBREVIATIONS								
Bladder Pump / Clear / No Color / No Odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential		SEC - Specific Electrical	
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units			



**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>				Time:							
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/7/2023</u>				Time: <u>1536</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>TPZ123</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	15:21		41.83												
	15:30	0.39	41.83	0	14.6	6.86	899	2.11	45.2	-38.2					
	15:33	0.52	41.83	0	14.7	6.85	896	1.84	37.2	-29.1					
	15:36	0.65	41.83	0	14.6	6.84	896	1.72	36.2	-24.2					
NOTES (continued)							ABBREVIATIONS								
Bladder Pump / Clear / No Color / No Odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential		SEC - Specific Electrical	
							FT BTOC - Feet Below Top of Casing na -					Conductance SU - Standard Units			





**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>			Time: _____								
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/7/2023</u>				Time: <u>1125</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>TPZ124D</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	11:16		26.22												
	11:19	0.13	26.22	0	14.4	6.78	1361	5.88	5.6	92					
	11:22	0.26	26.22	0	1.4	6.76	1401	1.8	3.1	26.4					
	11:25	0.39	26.22	0	14.4	6.77	1408	1.28	2.1	11.6					
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / No Color / No Odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential			
								SEC - Specific Electrical Conductance				SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION													
Site: <u>Joppa</u>		Client: <u>Vistra</u>											
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:							
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/7/2023</u>				Time: <u>1251</u>					
WELL INFORMATION				EVENT TYPE									
Well ID: <u>Well 3</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>					
WATER QUALITY INDICATOR PARAMETERS (continued)													
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity		
	12:27		31.51										
	12:30	0.13	31.51	0	15.8	6.66	924	4.18	64.7	64.9			
	12:33	0.26	31.51	0	15.8	6.57	923	2.09	66.4	74			
	12:36	0.39	31.51	0	15.8	6.56	917	1.62	55	80.6			
	12:39	0.52	31.51	0	15.8	6.55	916	1.48	49.3	84.3			
	12:42	0.65	31.51	0	15.7	6.55	912	1.36	36.3	88.5			
	12:45	0.78	31.51	0	15.7	6.54	911	1.28	28.5	92			
	12:48	0.91	31.51	0	15.7	6.54	909	1.23	27	94.6			
	12:51	1.04	31.51	0	15.7	6.54	908	1.2	33.9	96.5			
NOTES (continued)							ABBREVIATIONS						
Bladder Pump / Clear / No Color / No Odor							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential	
							FT BTOC - Feet Below Top of Casing na -					SEC - Specific Electrical Conductance	

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/8/2023</u>				Time: <u>1614</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>XPW01</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	16:05		12.93												
	16:08	0.13	12.93	0	16	8.36	993	2.14	28.6	-123.3					
	16:11	0.26	12.93	0	16	8.41	992	1.55	10.7	-139.6					
	16:14	0.39	12.93	0	15.9	8.47	998	1.27	6.1	-156.9					
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / No Color / Strong odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential SEC - Specific Electrical			
								FT BTOC - Feet Below Top of Casing na -				Conductance SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/9/2023</u>				Time: <u>1537</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>XPW03</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	15:28		9.43												
	15:31	0.13	10.45	1.02	16.4	10.76	791	3.3	1.6	-76.8					
	15:34	0.26	10.45	0	16.4	10.75	809	2.33	0	-90.4					
	15:37	0.39	10.45	0	16.4	10.74	822	2.01	0	-102.4					
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / No Color / No odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential			
								FT BTOC - Feet Below Top of Casing				SEC - Specific Electrical Conductance			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/10/2023</u>				Time: <u>1036</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>XTPW01</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	10:24		16.4												
	10:30	0.26	16.65	0.25	14	10.8	1332	1.72	44.4	-153.8					
	10:33	0.39	16.65	0	14.1	10.8	1351	1.42	32.1	-154.6					
	10:36	0.52	16.65	0	14	10.81	1369	1.19	7.2	-156.1					
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / No Color / No odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential			
								FT BTOC - Feet Below Top of Casing				SEC - Specific Electrical Conductance			





**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/7/2023</u>				Time: <u>1505</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>XTPW03</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	14:41		14.39												
	14:53	0.52	14.39	0	13.6	6.77	1516	1.13	75.3	47.7					
	14:56	0.65	14.39	0	13.6	6.76	1518	1.06	79.3	49.7					
	14:59	0.78	14.39	0	13.6	6.76	1518	1	37	49.9					
	15:02	0.91	14.39	0	13.6	6.76	1517	0.92	20.02	51.8					
	15:05	1.04	14.39	0	13.6	6.76	1516	0.86	20.7	50					
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / Brownish / No Odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential			
								FT BTOC - Feet Below Top of Casing na -				SEC - Specific Electrical Conductance			



**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION											
Site: <u>Joppa</u>		Client: <u>Vistra</u>									
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:					
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/10/2023</u>				Time: <u>0804</u>			
WELL INFORMATION				EVENT TYPE							
Well ID: <u>XTPW06</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>			
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
	<u>7:52</u>		<u>16.45</u>								
	<u>7:58</u>	<u>0.26</u>	<u>20.24</u>	<u>3.79</u>	<u>14</u>	<u>5.44</u>	<u>1641</u>	<u>1.99</u>	<u>45.5</u>	<u>-9.9</u>	
	<u>8:01</u>	<u>0.39</u>	<u>20.24</u>	<u>0</u>	<u>13.9</u>	<u>5.4</u>	<u>1615</u>	<u>1.74</u>	<u>19.3</u>	<u>-1.4</u>	
	<u>8:04</u>	<u>0.52</u>	<u>20.24</u>	<u>0</u>	<u>14.1</u>	<u>5.47</u>	<u>1714</u>	<u>1.37</u>	<u>7.11</u>	<u>-15.6</u>	
NOTES (continued)								ABBREVIATIONS			
Submersible / Clear / No Color / Moderate odor								Cond. - Actual Conductivity      ORP - Oxidation-Reduction Potential      SEC - Specific Electrical			
								FT BTOC - Feet Below Top of Casing na -      Conductance SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/10/2023</u>				Time: <u>1016</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>XTPW08</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	9:58		6.94												
	10:04	0.26	6.94	0	14.4	5.8	1806	1.33	570.8	-5.3					
	10:07	0.39	6.94	0	14.4	5.87	1820	1.29	866	-4.6					
	10:10	0.52	6.94	0	15.5	6.05	2055	1.36	501.7	-82.8					
	10:13	0.65	6.94	0	15.5	6.07	2058	1.15	435.8	-90.5					
	10:16	0.78	6.94	0	15.2	6.08	2045	1.09	497.3	-98					
NOTES (continued)								ABBREVIATIONS							
Submersible / Cloudy / Brown / Slight odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential			
								SEC - Specific Electrical Conductance				SU - Standard Units			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Joppa</u>		Client: <u>Vistra</u>													
Project Number: <u>23021699</u>		Task #:		Start Date: <u>3/07/2023</u>		Time:									
Field Personnel: <u>J. Riley / J. Colp</u>				Finish Date: <u>3/10/2023</u>				Time: <u>1100</u>							
WELL INFORMATION				EVENT TYPE											
Well ID: <u>G52DDUP</u>				Well Development Well Volume Approach Sampling				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	10:48		28												
	10:54		29.3	1.3	14.7	6.56	604	3.43	26.3	-21.8					
	10:57		29.3	0	14.8	6.48	604	7.64	15.4	16.3					
	11:00		29.3	0	14.8	6.54	604	10.09	8.9	26.7					
NOTES (continued)								ABBREVIATIONS							
Bladder Pump / Clear / No Color / No odor								Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential			
								FT BTOC - Feet Below Top of Casing na -				SEC - Specific Electrical Conductance SU - Standard Units			

**JOP 23Q1 Calibration Form**

	<b>Date</b>	<b>Time</b>	<b>Date</b>	<b>Time</b>	<b>Date</b>	<b>Time</b>	<b>Date</b>	<b>Time</b>
	3/7/2023	910	3/8/2023	731	3/9/2023	823	3/10/2023	626
	Standard	Result	Standard	Result	Standard	Result	Standard	Result
pH (SU)	4.00	3.95	4.00	4.07	4.00	4	4.00	4.06
	7.00	7.1	7.00	7	7.00	7.04	7.00	7.05
	10.00	10.08	10.00	9.9	10.00	10.09	10.00	10.03
SpC (μS/cm @25 deg C) LCS	1409	1411	1409	1412	1409	1487	1409	1382
	<i>Time</i>	<i>1719</i>		<i>1759</i>		<i>1709</i>		<i>1435</i>
pH (SU)	7.00	7.04	7.00	7.00	7.00	7.02	7.00	7.00
SpC (μS/cm @25 deg C) LCS	1409	1389	1409	1416	1409	1401	1409	1420

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

**PROJECT INFORMATION**

Site: Joppa Client: 1.1.5 tra  
 Project Number: \_\_\_\_\_ Task #: \_\_\_\_\_ Start Date: 3-21-23 Time: \_\_\_\_\_  
 Field Personnel: J. C. P. / T. Carroll Finish Date: 3-21-23 Time: 12:46

WELL INFORMATION	EVENT TYPE
Well ID: <u>G101 LF</u> Casing ID: _____ inches	<input type="checkbox"/> Well Development <input type="checkbox"/> Low-Flow / Low Stress Sampling <input type="checkbox"/> Well Volume Approach Sampling <input type="checkbox"/> Other (Specify): _____

WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
	11:58		6.16		14.2	6.71	433.1	5.08	1991.2	100.5	
	12:19	.91			14.2	6.71	433.1	5.08	1991.2	100.5	
	12:22	1.04			14.2	6.70	428.9	5.05	1995.7	102.6	
	12:25	1.17			14.2	6.69	423.6	5.08	1764.2	104.8	
	12:28	1.30			14.2	6.67	418.2	5.07	1514.4	106.7	
	12:31	1.43			14.2	6.65	411.5	5.11	1259.7	109.5	
	12:34	1.56			14.1	6.63	407.8	5.14	1039.3	111.6	
	12:37	1.69			14.2	6.62	403.2	5.12	851.8	113.6	
	12:40	1.82			14.2	6.61	399.3	5.14	780.3	115.7	
	12:43	1.95			14.2	6.60	397.7	5.15	682.2	117.2	
	12:46	2.08			14.2	6.59	395.9	5.16	672.0	118.6	Cloudy

NOTES (continued)	ABBREVIATIONS
tip of water discharge line broke. bladder pump / no odor / orangish / Cloudy	Cond. - Actual Conductivity      ORP - Oxidation-Reduction Potential FT BTOP - Feet Below Top of Casing      SEC - Specific Electrical Conductance na - Not Applicable      SU - Standard Units nm - Not Measured      Temp - Temperature °C - Degrees Celsius



**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION																
Site: <u>Joppa</u>				Client: <u>Vistra</u>												
Project Number: _____			Task #: _____			Start Date: <u>3-21-23</u>			Time: _____							
Field Personnel: <u>J. GIP / T. Carroll</u>				Finish Date: <u>3-21-23</u>				Time: <u>11:46</u>								
WELL INFORMATION				EVENT TYPE												
Well ID: <u>G111 LP</u>				<input type="checkbox"/> Well Development				<input type="checkbox"/> Low-Flow / Low Stress Sampling								
Casing ID: _____ inches				<input type="checkbox"/> Well Volume Approach Sampling				<input type="checkbox"/> Other (Specify): _____								
WATER QUALITY INDICATOR PARAMETERS (continued)																
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity					
	<u>11:22</u>		<u>48.46</u>													
	<u>11:31</u>	<u>.39</u>			<u>15.3</u>	<u>6.74</u>	<u>441</u>	<u>4.10</u>	<u>16.9</u>	<u>47.5</u>						
	<u>11:34</u>	<u>.52</u>			<u>15.3</u>	<u>6.66</u>	<u>438.6</u>	<u>3.69</u>	<u>17.0</u>	<u>55.2</u>						
	<u>11:37</u>	<u>.65</u>			<u>15.4</u>	<u>6.61</u>	<u>436.1</u>	<u>3.13</u>	<u>18.4</u>	<u>62.8</u>						
	<u>11:40</u>	<u>.78</u>			<u>15.1</u>	<u>6.58</u>	<u>437.9</u>	<u>2.72</u>	<u>17.7</u>	<u>68.4</u>						
	<u>11:43</u>	<u>.91</u>			<u>15.2</u>	<u>6.57</u>	<u>436.4</u>	<u>2.43</u>	<u>15.3</u>	<u>72.4</u>						
	<u>11:46</u>	<u>1.04</u>			<u>15.4</u>	<u>6.56</u>	<u>433.4</u>	<u>2.26</u>	<u>15.9</u>	<u>76.0</u>	<u>Clear</u>					
NOTES (continued)							ABBREVIATIONS									
<u>bladder pump / no color / no odor / clear</u>							Cond. - Actual Conductivity					ORP - Oxidation-Reduction Potential				
							FT BTOC - Feet Below Top of Casing					SEC - Specific Electrical Conductance				
							na - Not Applicable					SU - Standard Units				
							nm - Not Measured					Temp - Temperature				
												°C - Degrees Celsius				

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION											
Site: <u>JOPPA</u>				Client: <u>Vistra</u>							
Project Number: _____			Task #: _____			Start Date: <u>3-21-23</u>			Time: _____		
Field Personnel: <u>J. Cobb / T. Carroll</u>				Finish Date: <u>3-21-23</u>				Time: <u>11:05</u>			
WELL INFORMATION				EVENT TYPE							
Well ID: <u>xpw02</u>				<input type="checkbox"/> Well Development				<input type="checkbox"/> Low-Flow / Low Stress Sampling			
Casing ID: _____ inches				<input type="checkbox"/> Well Volume Approach Sampling				<input type="checkbox"/> Other (Specify): _____			
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
	<u>10:41</u>		<u>2.93</u>								
	<u>10:54</u>	<u>.78</u>			<u>15.7</u>	<u>6.78</u>	<u>6577</u>	<u>7.53</u>	<u>5.7</u>	<u>16.0</u>	
	<u>11:02</u>	<u>.91</u>			<u>15.2</u>	<u>7.55</u>	<u>6280</u>	<u>3.62</u>	<u>2.1</u>	<u>-91.9</u>	
	<u>11:05</u>	<u>1.04</u>			<u>14.5</u>	<u>7.60</u>	<u>6277</u>	<u>2.15</u>	<u>1.6</u>	<u>-149.8</u>	<u>Clear</u>
NOTES (continued)							ABBREVIATIONS				
bladder pump, no color, no odor, clear							Cond. - Actual Conductivity      ORP - Oxidation-Reduction Potential FT BTDC - Feet Below Top of Casing      SEC - Specific Electrical Conductance na - Not Applicable      SU - Standard Units nm - Not Measured      Temp - Temperature °C - Degrees Celsius				

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

Field Analysis Log

23030880

Cross Reference to Sample ID	Date mm/dd/yy	Time	Temp. C	pH Results			Conductivity			Other:				
				Reading 1	Reading 2	LCSD	Range Factor	Reading 1	Reading 2	COLOR BLANK	Read1/units	COLORBLANK	Read2/units	
LCS	3/21/23	10:56	10.7	7.10				1414						
CCU	3-21-23	13:11	12.8	7.03				1434						

\*\*\*\* Field Meter ID for Temp, pH & Conductivity: YSi 055

\*\*\*\* Field Meter ID for ( DR900 ): A15

Field Temp SOP 1156	SW846	Std Methods	Lot #	pH 4.0 Buffer	280933	Conductivity Std.	1413	2GT009	Std.	PIPETTE
pH in the Field SOP 1152	9040B	2550 B		pH 7.0 Buffer	2GT792	Conductivity Std.			Std.	
Field Cond. SOP 1155	9050A	4500-H B		pH 10.0 Buffer	1G#486	Conductivity Std.			Std.	
Other: _____		2510 B		pH LCS/LCSD	WC 2252296	Conductivity LCS/LCSD			LCS/LCSD	

		Reading	Conductivity Calibration	Reading	units	Calibration	Reading
pH Calibration	4.00	<u>3.98</u>	<u>1413</u> $\mu$ S	0-199.9	$\mu$ S	Std	Units
Date: <u>3/21/23</u>	7.00	<u>6.92</u>	<u>1414</u> $\mu$ S	0-1999	$\mu$ S	Std	Units
Time: <u>10:40</u>	10.00	<u>9.90</u>	mS	0-19.99	mS	Std	Units

Field Analyst Sig & Date: Jessy Caswell 3/21/23      Field Analyst Sig & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_      Reviewed By & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_      Reviewed By & Date: \_\_\_\_\_

Comments:

June 19, 2023

Eric Bauer  
Ramboll  
300 S. Wacker Drive  
Suite 130  
Chicago, IL 60606  
TEL: (414) 837-3607  
FAX: (414) 837-3608



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

**RE: JOP-23Q2**

**WorkOrder: 23041536**

Dear Eric Bauer:

TEKLAB, INC received 20 samples on 5/4/2023 8:10:00 AM 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](mailto:ehurley@teklabinc.com)



## Report Contents

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

**Client:** Ramboll

**Work Order:** 23041536

**Client Project:** JOP-23Q2

**Report Date:** 19-Jun-23

**This reporting package includes the following:**

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Sample Summary	36
Dates Report	37
Quality Control Results	55
Receiving Check List	81
Chain of Custody	Appended



## Definitions

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

**Client:** Ramboll

**Work Order:** 23041536

**Client Project:** JOP-23Q2

**Report Date:** 19-Jun-23

### 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:** 23041536

**Client Project:** JOP-23Q2

**Report Date:** 19-Jun-23

### Qualifiers

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





## Case Narrative

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

**Client:** Ramboll  
**Client Project:** JOP-23Q2

**Work Order:** 23041536  
**Report Date:** 19-Jun-23

**Cooler Receipt Temp:** 4.2 °C

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

JOP\_007 will be reported as collected at 1812 per the field file. EAH 5/17/23

JOP\_257\_401 data is included in this report. EAH 5/30/23

This report was revised on June 1, 2023 per Eric Bauer's request. The reason for the revision is to remove Total Copper values reported in error for JOP\_G011 and JOP\_G051&D. Please replace report dated May 30, 2023 with this report. EAH 6/1/23

This is the second revision for this WO last revised on June 19, 2023, per Teklab QA departments's request. The reason for this revision is to correct DO values due to an error in recorded units in the field file(s). Please replace report dated June 1, 2023 with this report. EAH 6/19/23

### 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  
**Client Project:** JOP-23Q2

**Work Order:** 23041536  
**Report Date:** 19-Jun-23

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2024	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2024	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2023	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2023	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2023	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		1/31/2024	Collinsville
Missouri	MDNR	00930		5/31/2023	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



## Laboratory Results

Client: Ramboll  
Client Project: JOP-23Q2  
Lab ID: 23041536-001  
Matrix: GROUNDWATER

Work Order: 23041536  
Report Date: 19-Jun-23  
Client Sample ID: JOP\_G001&D  
Collection Date: 05/02/2023 9:26

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		40.56	ft	1	05/02/2023 9:26	R328720
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		23	NTU	1	05/02/2023 9:26	R328720
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		145	mV	1	05/02/2023 9:26	R328720
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		682	µS/cm	1	05/02/2023 9:26	R328720
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		15.5	°C	1	05/02/2023 9:26	R328720
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.85	mg/L	1	05/02/2023 9:26	R328720
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.34		1	05/02/2023 9:26	R328720
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		240	mg/L	1	05/04/2023 16:38	R328332
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	05/04/2023 16:38	R328332
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		336	mg/L	1	05/06/2023 10:14	R328428
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	6	10		26	mg/L	1	05/10/2023 14:46	R328607
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.22	mg/L	1	05/09/2023 11:51	R328523
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		10	mg/L	1	05/10/2023 14:47	R328580
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Arsenic	NELAP	0.0087	0.0100		< 0.0100	mg/L	1	05/06/2023 5:47	205805
Barium	NELAP	0.0007	0.0025		0.213	mg/L	1	05/06/2023 5:47	205805
Beryllium	NELAP	0.0002	0.0005	J	0.0002	mg/L	1	05/06/2023 5:47	205805
Boron	NELAP	0.0090	0.0200		0.0210	mg/L	1	05/06/2023 5:47	205805
Cadmium	NELAP	0.0005	0.0020		< 0.0020	mg/L	1	05/06/2023 5:47	205805
Calcium	NELAP	0.0350	0.100		28.8	mg/L	1	05/06/2023 5:47	205805
Chromium	NELAP	0.0028	0.0050		0.0050	mg/L	1	05/06/2023 5:47	205805
Lead	NELAP	0.0040	0.0075		< 0.0075	mg/L	1	05/06/2023 5:47	205805
Lithium	NELAP	0.0190	0.0500		< 0.0500	mg/L	10	05/13/2023 13:53	205805
Magnesium	NELAP	0.0055	0.0500		8.43	mg/L	1	05/06/2023 5:47	205805
Molybdenum	NELAP	0.0037	0.0100		< 0.0100	mg/L	1	05/06/2023 5:47	205805
Potassium	NELAP	0.0400	0.100		1.28	mg/L	1	05/06/2023 5:47	205805
Sodium	NELAP	0.0180	0.0500		90.3	mg/L	1	05/06/2023 5:47	205805
<i>Elevated reporting limit due to high levels of target and non-target analytes.</i>									
<i>CCV recovered outside the upper control limits for Li. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010	J	0.0009	mg/L	5	05/05/2023 12:28	205805
Cobalt	NELAP	0.0001	0.0010		0.0058	mg/L	5	05/05/2023 12:28	205805
Selenium	NELAP	0.0006	0.0010		0.0015	mg/L	5	05/05/2023 12:28	205805
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	05/05/2023 12:28	205805



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041536-001  
**Matrix:** GROUNDWATER

**Work Order:** 23041536  
**Report Date:** 19-Jun-23  
**Client Sample ID:** JOP\_G001&D  
**Collection Date:** 05/02/2023 9:26

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	05/05/2023 12:26	205809



Client: Ramboll  
Client Project: JOP-23Q2  
Lab ID: 23041536-002  
Matrix: GROUNDWATER

Work Order: 23041536  
Report Date: 19-Jun-23  
Client Sample ID: JOP\_G002&D  
Collection Date: 05/03/2023 8:49

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		40.94	ft	1	05/03/2023 8:49	R328720
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		1.3	NTU	1	05/03/2023 8:49	R328720
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		182	mV	1	05/03/2023 8:49	R328720
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		494	µS/cm	1	05/03/2023 8:49	R328720
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		14.3	°C	1	05/03/2023 8:49	R328720
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		2.07	mg/L	1	05/03/2023 8:49	R328720
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.46		1	05/03/2023 8:49	R328720
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		140	mg/L	1	05/04/2023 16:48	R328332
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	05/04/2023 16:48	R328332
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		230	mg/L	1	05/08/2023 10:24	R328528
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	6	10		13	mg/L	1	05/10/2023 14:55	R328607
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.22	mg/L	1	05/09/2023 11:53	R328523
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		21	mg/L	1	05/10/2023 14:55	R328580
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Arsenic	NELAP	0.0087	0.0100		< 0.0100	mg/L	1	05/06/2023 5:51	205805
Barium	NELAP	0.0007	0.0025		0.210	mg/L	1	05/06/2023 5:51	205805
Beryllium	NELAP	0.0002	0.0005		< 0.0005	mg/L	1	05/06/2023 5:51	205805
Boron	NELAP	0.0090	0.0200		0.0412	mg/L	1	05/06/2023 5:51	205805
Cadmium	NELAP	0.0005	0.0020		< 0.0020	mg/L	1	05/06/2023 5:51	205805
Calcium	NELAP	0.0350	0.100		38.7	mg/L	1	05/06/2023 5:51	205805
Chromium	NELAP	0.0028	0.0050		< 0.0050	mg/L	1	05/06/2023 5:51	205805
Lead	NELAP	0.0040	0.0075		< 0.0075	mg/L	1	05/06/2023 5:51	205805
Lithium	NELAP	0.0190	0.0500		< 0.0500	mg/L	10	05/13/2023 13:56	205805
Magnesium	NELAP	0.0055	0.0500		10.4	mg/L	1	05/06/2023 5:51	205805
Molybdenum	NELAP	0.0037	0.0100		< 0.0100	mg/L	1	05/06/2023 5:51	205805
Potassium	NELAP	0.0400	0.100		1.14	mg/L	1	05/06/2023 5:51	205805
Sodium	NELAP	0.0180	0.0500		39.1	mg/L	1	05/06/2023 5:51	205805
<i>Elevated reporting limit due to high levels of target and non-target analytes.</i>									
<i>CCV recovered outside the upper control limits for Li. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	05/05/2023 12:35	205805
Cobalt	NELAP	0.0001	0.0010		< 0.0010	mg/L	5	05/05/2023 12:35	205805
Selenium	NELAP	0.0006	0.0010		0.0016	mg/L	5	05/05/2023 12:35	205805
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	05/05/2023 12:35	205805



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041536-002  
**Matrix:** GROUNDWATER

**Work Order:** 23041536  
**Report Date:** 19-Jun-23  
**Client Sample ID:** JOP\_G002&D  
**Collection Date:** 05/03/2023 8:49

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	05/05/2023 12:28	205809



Client: Ramboll  
Client Project: JOP-23Q2  
Lab ID: 23041536-003  
Matrix: GROUNDWATER

Work Order: 23041536  
Report Date: 19-Jun-23  
Client Sample ID: JOP\_G003  
Collection Date: 05/03/2023 8:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		35.97	ft	1	05/03/2023 8:08	R328720
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		130	NTU	1	05/03/2023 8:08	R328720
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		226	mV	1	05/03/2023 8:08	R328720
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		674	µS/cm	1	05/03/2023 8:08	R328720
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		15.3	°C	1	05/03/2023 8:08	R328720
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		3.79	mg/L	1	05/03/2023 8:08	R328720
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.18		1	05/03/2023 8:08	R328720
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		135	mg/L	1	05/04/2023 16:52	R328332
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	05/04/2023 16:52	R328332
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	40	50		350	mg/L	2.5	05/08/2023 10:24	R328528
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	31	50	S	97	mg/L	5	05/10/2023 15:16	R328607
<i>Matrix spike did not recover within control limits due to matrix interference.</i>									
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.20	mg/L	1	05/09/2023 11:55	R328523
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	8		28	mg/L	2	05/10/2023 15:05	R328580
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Arsenic	NELAP	0.0087	0.0100		< 0.0100	mg/L	1	05/06/2023 5:55	205805
Barium	NELAP	0.0007	0.0025		0.100	mg/L	1	05/06/2023 5:55	205805
Beryllium	NELAP	0.0002	0.0005		0.0010	mg/L	1	05/06/2023 5:55	205805
Boron	NELAP	0.0090	0.0200		0.380	mg/L	1	05/06/2023 5:55	205805
Cadmium	NELAP	0.0005	0.0020		< 0.0020	mg/L	1	05/06/2023 5:55	205805
Calcium	NELAP	0.0350	0.100		52.6	mg/L	1	05/06/2023 5:55	205805
Chromium	NELAP	0.0028	0.0050		0.0235	mg/L	1	05/06/2023 5:55	205805
Lead	NELAP	0.0040	0.0075	J	0.0058	mg/L	1	05/06/2023 5:55	205805
Lithium	NELAP	0.0190	0.0500		< 0.0500	mg/L	10	05/13/2023 14:00	205805
Magnesium	NELAP	0.0055	0.0500		16.6	mg/L	1	05/06/2023 5:55	205805
Molybdenum	NELAP	0.0037	0.0100		< 0.0100	mg/L	1	05/06/2023 5:55	205805
Potassium	NELAP	0.0400	0.100		1.70	mg/L	1	05/06/2023 5:55	205805
Sodium	NELAP	0.0180	0.0500		41.9	mg/L	1	05/06/2023 5:55	205805
<i>Elevated reporting limit due to high levels of target and non-target analytes.</i>									
<i>CCV recovered outside the upper control limits for Li. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	05/05/2023 13:32	205805
Cobalt	NELAP	0.0001	0.0010		0.0146	mg/L	5	05/05/2023 13:32	205805
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	05/08/2023 15:31	205805





**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041536-003  
**Matrix:** GROUNDWATER

**Work Order:** 23041536  
**Report Date:** 19-Jun-23  
**Client Sample ID:** JOP\_G003  
**Collection Date:** 05/03/2023 8:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	05/05/2023 13:32	205805
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	05/05/2023 12:31	205809



Client: Ramboll  
Client Project: JOP-23Q2  
Lab ID: 23041536-004  
Matrix: GROUNDWATER

Work Order: 23041536  
Report Date: 19-Jun-23

Client Sample ID: JOP\_G005  
Collection Date: 05/03/2023 17:01

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		40.85	ft	1	05/03/2023 17:01	R328720
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		7.0	NTU	1	05/03/2023 17:01	R328720
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		128	mV	1	05/03/2023 17:01	R328720
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		754	µS/cm	1	05/03/2023 17:01	R328720
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		17.1	°C	1	05/03/2023 17:01	R328720
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		2.39	mg/L	1	05/03/2023 17:01	R328720
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.49		1	05/03/2023 17:01	R328720
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		163	mg/L	1	05/11/2023 9:03	R328650
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	05/11/2023 9:03	R328650
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		388	mg/L	1	05/08/2023 11:12	R328528
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		112	mg/L	10	05/10/2023 15:48	R328607
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.38	mg/L	1	05/09/2023 11:56	R328523
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		24	mg/L	1	05/10/2023 15:43	R328580
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Arsenic	NELAP	0.0087	0.0100		< 0.0100	mg/L	1	05/06/2023 5:59	205805
Barium	NELAP	0.0007	0.0025		0.212	mg/L	1	05/06/2023 5:59	205805
Beryllium	NELAP	0.0002	0.0005		< 0.0005	mg/L	1	05/06/2023 5:59	205805
Boron	NELAP	0.0090	0.0200		0.0478	mg/L	1	05/06/2023 5:59	205805
Cadmium	NELAP	0.0005	0.0020		< 0.0020	mg/L	1	05/06/2023 5:59	205805
Calcium	NELAP	0.0350	0.100		54.4	mg/L	1	05/06/2023 5:59	205805
Chromium	NELAP	0.0028	0.0050		< 0.0050	mg/L	1	05/06/2023 5:59	205805
Lead	NELAP	0.0040	0.0075		< 0.0075	mg/L	1	05/06/2023 5:59	205805
Lithium	NELAP	0.0190	0.0500		< 0.0500	mg/L	10	05/13/2023 14:04	205805
Magnesium	NELAP	0.0055	0.0500		19.3	mg/L	1	05/06/2023 5:59	205805
Molybdenum	NELAP	0.0037	0.010	J	0.0051	mg/L	1	05/06/2023 5:59	205805
Potassium	NELAP	0.0400	0.100		1.68	mg/L	1	05/06/2023 5:59	205805
Sodium	NELAP	0.0180	0.0500		46.7	mg/L	1	05/06/2023 5:59	205805
<i>Elevated reporting limit due to high levels of target and non-target analytes.</i>									
<i>CCV recovered outside the upper control limits for Li. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	05/05/2023 13:39	205805
Cobalt	NELAP	0.0001	0.0010		0.0103	mg/L	5	05/05/2023 13:39	205805
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	05/05/2023 13:39	205805
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	05/05/2023 13:39	205805



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041536-004  
**Matrix:** GROUNDWATER

**Work Order:** 23041536  
**Report Date:** 19-Jun-23  
**Client Sample ID:** JOP\_G005  
**Collection Date:** 05/03/2023 17:01

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	05/05/2023 12:33	205809



Client: Ramboll  
Client Project: JOP-23Q2  
Lab ID: 23041536-005  
Matrix: GROUNDWATER

Work Order: 23041536  
Report Date: 19-Jun-23  
Client Sample ID: JOP\_G006  
Collection Date: 05/03/2023 17:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		37.95	ft	1	05/03/2023 17:35	R328720
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		54	NTU	1	05/03/2023 17:35	R328720
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		141	mV	1	05/03/2023 17:35	R328720
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		1010	µS/cm	1	05/03/2023 17:35	R328720
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		15.7	°C	1	05/03/2023 17:35	R328720
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		1.63	mg/L	1	05/03/2023 17:35	R328720
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.63		1	05/03/2023 17:35	R328720
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		166	mg/L	1	05/04/2023 16:56	R328332
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	05/04/2023 16:56	R328332
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	40	50		525	mg/L	2.5	05/08/2023 11:12	R328528
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		208	mg/L	10	05/10/2023 15:56	R328607
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.26	mg/L	1	05/09/2023 11:59	R328523
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		22	mg/L	1	05/10/2023 15:51	R328580
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Arsenic	NELAP	0.0087	0.0100		< 0.0100	mg/L	1	05/06/2023 6:25	205805
Barium	NELAP	0.0007	0.0025		0.0454	mg/L	1	05/06/2023 6:25	205805
Beryllium	NELAP	0.0002	0.0005	J	0.0003	mg/L	1	05/06/2023 6:25	205805
Boron	NELAP	0.0090	0.0200		3.28	mg/L	1	05/06/2023 6:25	205805
Cadmium	NELAP	0.0005	0.0020		< 0.0020	mg/L	1	05/06/2023 6:25	205805
Calcium	NELAP	0.0350	0.100	S	92.5	mg/L	1	05/06/2023 6:25	205805
Chromium	NELAP	0.0028	0.0050		0.0084	mg/L	1	05/06/2023 6:25	205805
Lead	NELAP	0.0040	0.0075		< 0.0075	mg/L	1	05/06/2023 6:25	205805
Lithium	NELAP	0.0095	0.0250		< 0.0250	mg/L	5	05/15/2023 12:35	205805
Magnesium	NELAP	0.0055	0.0500	S	24.4	mg/L	1	05/06/2023 6:25	205805
Molybdenum	NELAP	0.0037	0.0100		< 0.0100	mg/L	1	05/06/2023 6:25	205805
Potassium	NELAP	0.0400	0.100		2.49	mg/L	1	05/06/2023 6:25	205805
Sodium	NELAP	0.0180	0.0500	S	49.7	mg/L	1	05/06/2023 6:25	205805
<i>Elevated reporting limit due to high levels of target and non-target analytes. Matrix spike control limits are not applicable due to high sample/spike ratio.</i>									
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		0.0015	mg/L	5	05/05/2023 15:33	205805
Cobalt	NELAP	0.0001	0.0010		0.0040	mg/L	5	05/05/2023 15:33	205805
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	05/05/2023 15:33	205805
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	05/05/2023 15:33	205805



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041536-005  
**Matrix:** GROUNDWATER

**Work Order:** 23041536  
**Report Date:** 19-Jun-23  
**Client Sample ID:** JOP\_G006  
**Collection Date:** 05/03/2023 17:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020	J	<b>0.00010</b>	mg/L	1	05/05/2023 12:35	205809



Client: Ramboll  
Client Project: JOP-23Q2  
Lab ID: 23041536-006  
Matrix: GROUNDWATER

Work Order: 23041536  
Report Date: 19-Jun-23  
Client Sample ID: JOP\_G007  
Collection Date: 05/03/2023 18:12

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		38.15	ft	1	05/03/2023 18:12	R328720
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		170	NTU	1	05/03/2023 18:12	R328720
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		161	mV	1	05/03/2023 18:12	R328720
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		1050	µS/cm	1	05/03/2023 18:12	R328720
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		15.6	°C	1	05/03/2023 18:12	R328720
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		1.13	mg/L	1	05/03/2023 18:12	R328720
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.38		1	05/03/2023 18:12	R328720
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		171	mg/L	1	05/11/2023 9:08	R328650
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	05/11/2023 9:08	R328650
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	40	50		590	mg/L	2.5	05/08/2023 11:12	R328528
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		260	mg/L	10	05/10/2023 16:04	R328607
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.40	mg/L	1	05/09/2023 12:00	R328523
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		22	mg/L	1	05/10/2023 15:59	R328580
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Arsenic	NELAP	0.0087	0.0100		< 0.0100	mg/L	1	05/06/2023 6:02	205805
Barium	NELAP	0.0007	0.0025		0.215	mg/L	1	05/06/2023 6:02	205805
Beryllium	NELAP	0.0002	0.0005		0.0014	mg/L	1	05/06/2023 6:02	205805
Boron	NELAP	0.0090	0.0200		4.27	mg/L	1	05/06/2023 6:02	205805
Cadmium	NELAP	0.0005	0.0020		< 0.0020	mg/L	1	05/06/2023 6:02	205805
Calcium	NELAP	0.0350	0.100		97.3	mg/L	1	05/06/2023 6:02	205805
Chromium	NELAP	0.0028	0.0050		0.0365	mg/L	1	05/06/2023 6:02	205805
Lead	NELAP	0.0040	0.0075	J	0.0060	mg/L	1	05/06/2023 6:02	205805
Lithium	NELAP	0.0190	0.0500		< 0.0500	mg/L	10	05/13/2023 14:07	205805
Magnesium	NELAP	0.0055	0.0500		23.4	mg/L	1	05/06/2023 6:02	205805
Molybdenum	NELAP	0.0037	0.0100		< 0.0100	mg/L	1	05/06/2023 6:02	205805
Potassium	NELAP	0.0400	0.100		4.36	mg/L	1	05/06/2023 6:02	205805
Sodium	NELAP	0.0180	0.0500		69.9	mg/L	1	05/06/2023 6:02	205805
<i>Elevated reporting limit due to high levels of target and non-target analytes.</i>									
<i>CCV recovered outside the upper control limits for Li. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010	J	0.0006	mg/L	5	05/05/2023 13:45	205805
Cobalt	NELAP	0.0001	0.0010		0.0078	mg/L	5	05/05/2023 13:45	205805
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	05/05/2023 13:45	205805
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	05/05/2023 13:45	205805



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041536-006  
**Matrix:** GROUNDWATER

**Work Order:** 23041536  
**Report Date:** 19-Jun-23  
**Client Sample ID:** JOP\_G007  
**Collection Date:** 05/03/2023 18:12

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	05/05/2023 12:37	205809





Client: Ramboll  
Client Project: JOP-23Q2  
Lab ID: 23041536-007  
Matrix: GROUNDWATER

Work Order: 23041536  
Report Date: 19-Jun-23  
Client Sample ID: JOP\_G008  
Collection Date: 05/03/2023 15:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		29.73	ft	1	05/03/2023 15:45	R328720
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		36	NTU	1	05/03/2023 15:45	R328720
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		130	mV	1	05/03/2023 15:45	R328720
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		1230	µS/cm	1	05/03/2023 15:45	R328720
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		17.3	°C	1	05/03/2023 15:45	R328720
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		3.38	mg/L	1	05/03/2023 15:45	R328720
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.88		1	05/03/2023 15:45	R328720
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		154	mg/L	1	05/04/2023 17:08	R328332
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	05/04/2023 17:08	R328332
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		714	mg/L	1	05/09/2023 12:36	R328566
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		363	mg/L	10	05/10/2023 16:12	R328607
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.29	mg/L	1	05/09/2023 12:02	R328523
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		16	mg/L	1	05/10/2023 16:07	R328580
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Arsenic	NELAP	0.0087	0.0100		0.0112	mg/L	1	05/06/2023 6:36	205805
Barium	NELAP	0.0007	0.0025		0.0974	mg/L	1	05/06/2023 6:36	205805
Beryllium	NELAP	0.0002	0.0005		0.0005	mg/L	1	05/06/2023 6:36	205805
Boron	NELAP	0.0090	0.0200		5.43	mg/L	1	05/06/2023 6:36	205805
Cadmium	NELAP	0.0005	0.0020		< 0.0020	mg/L	1	05/06/2023 6:36	205805
Calcium	NELAP	0.0350	0.100		140	mg/L	1	05/06/2023 6:36	205805
Chromium	NELAP	0.0028	0.0050		0.0093	mg/L	1	05/06/2023 6:36	205805
Lead	NELAP	0.0040	0.0075		< 0.0075	mg/L	1	05/06/2023 6:36	205805
Lithium	NELAP	0.0190	0.0500		< 0.0500	mg/L	10	05/13/2023 14:11	205805
Magnesium	NELAP	0.0055	0.0500		32.2	mg/L	1	05/06/2023 6:36	205805
Molybdenum	NELAP	0.0037	0.0100		< 0.0100	mg/L	1	05/06/2023 6:36	205805
Potassium	NELAP	0.0400	0.100		1.67	mg/L	1	05/06/2023 6:36	205805
Sodium	NELAP	0.0180	0.0500		41.7	mg/L	1	05/06/2023 6:36	205805
<i>Elevated reporting limit due to high levels of target and non-target analytes.</i>									
<i>CCV recovered outside the upper control limits for Li. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	05/05/2023 13:51	205805
Cobalt	NELAP	0.0001	0.0010		0.0113	mg/L	5	05/05/2023 13:51	205805
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	05/05/2023 13:51	205805
Thallium	NELAP	0.0010	0.0020	J	0.0013	mg/L	5	05/05/2023 13:51	205805



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041536-007  
**Matrix:** GROUNDWATER

**Work Order:** 23041536  
**Report Date:** 19-Jun-23  
**Client Sample ID:** JOP\_G008  
**Collection Date:** 05/03/2023 15:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	05/05/2023 12:40	205809



Client: Ramboll  
Client Project: JOP-23Q2  
Lab ID: 23041536-008  
Matrix: GROUNDWATER

Work Order: 23041536  
Report Date: 19-Jun-23

Client Sample ID: JOP\_G009

Collection Date: 05/03/2023 13:13

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		39.04	ft	1	05/03/2023 13:13	R328720
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		58	NTU	1	05/03/2023 13:13	R328720
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		13	mV	1	05/03/2023 13:13	R328720
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		946	µS/cm	1	05/03/2023 13:13	R328720
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		16.9	°C	1	05/03/2023 13:13	R328720
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.88	mg/L	1	05/03/2023 13:13	R328720
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.37		1	05/03/2023 13:13	R328720
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		110	mg/L	1	05/04/2023 17:12	R328332
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	05/04/2023 17:12	R328332
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20	H	534	mg/L	1	05/19/2023 12:38	R329144
<i>Sample required re-analysis out of hold time.</i>									
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		241	mg/L	10	05/10/2023 16:33	R328607
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.34	mg/L	1	05/09/2023 12:13	R328523
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		20	mg/L	1	05/10/2023 16:15	R328580
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Arsenic	NELAP	0.0087	0.010	J	0.0091	mg/L	1	05/06/2023 6:39	205805
Barium	NELAP	0.0007	0.0025		0.0560	mg/L	1	05/06/2023 6:39	205805
Beryllium	NELAP	0.0002	0.0005		0.0008	mg/L	1	05/06/2023 6:39	205805
Boron	NELAP	0.0090	0.0200		3.87	mg/L	1	05/06/2023 6:39	205805
Cadmium	NELAP	0.0005	0.0020		< 0.0020	mg/L	1	05/06/2023 6:39	205805
Calcium	NELAP	0.0350	0.100		67.2	mg/L	1	05/06/2023 6:39	205805
Chromium	NELAP	0.0028	0.0050		0.0084	mg/L	1	05/06/2023 6:39	205805
Lead	NELAP	0.0040	0.0075		< 0.0075	mg/L	1	05/06/2023 6:39	205805
Lithium	NELAP	0.0190	0.0500		< 0.0500	mg/L	10	05/13/2023 14:41	205805
Magnesium	NELAP	0.0055	0.0500		24.7	mg/L	1	05/06/2023 6:39	205805
Molybdenum	NELAP	0.0037	0.0100		< 0.0100	mg/L	1	05/06/2023 6:39	205805
Potassium	NELAP	0.0400	0.100		0.987	mg/L	1	05/06/2023 6:39	205805
Sodium	NELAP	0.0180	0.0500		66.3	mg/L	1	05/06/2023 6:39	205805
<i>Elevated reporting limit due to high levels of target and non-target analytes.</i>									
<i>CCV recovered outside the upper control limits for Li. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		0.0037	mg/L	5	05/05/2023 13:58	205805
Cobalt	NELAP	0.0001	0.0010		0.0071	mg/L	5	05/05/2023 13:58	205805
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	05/05/2023 13:58	205805



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041536-008  
**Matrix:** GROUNDWATER

**Work Order:** 23041536  
**Report Date:** 19-Jun-23  
**Client Sample ID:** JOP\_G009  
**Collection Date:** 05/03/2023 13:13

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	05/05/2023 13:58	205805
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	05/05/2023 12:42	205809



Client: Ramboll  
Client Project: JOP-23Q2  
Lab ID: 23041536-009  
Matrix: GROUNDWATER

Work Order: 23041536  
Report Date: 19-Jun-23

Client Sample ID: JOP\_G010

Collection Date: 05/03/2023 15:12

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		39.30	ft	1	05/03/2023 15:12	R328720
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		59	NTU	1	05/03/2023 15:12	R328720
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		135	mV	1	05/03/2023 15:12	R328720
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		1450	µS/cm	1	05/03/2023 15:12	R328720
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		17.1	°C	1	05/03/2023 15:12	R328720
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		2.68	mg/L	1	05/03/2023 15:12	R328720
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.60		1	05/03/2023 15:12	R328720
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		160	mg/L	1	05/11/2023 9:14	R328650
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	05/11/2023 9:14	R328650
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	40	50		760	mg/L	2.5	05/08/2023 11:13	R328528
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		365	mg/L	10	05/10/2023 16:41	R328607
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.30	mg/L	1	05/09/2023 12:15	R328523
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		27	mg/L	1	05/10/2023 16:36	R328580
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Arsenic	NELAP	0.0087	0.0100		< 0.0100	mg/L	1	05/06/2023 6:43	205805
Barium	NELAP	0.0007	0.0025		0.0624	mg/L	1	05/06/2023 6:43	205805
Beryllium	NELAP	0.0002	0.0005		0.0007	mg/L	1	05/06/2023 6:43	205805
Boron	NELAP	0.0090	0.0200		3.08	mg/L	1	05/06/2023 6:43	205805
Cadmium	NELAP	0.0005	0.0020		< 0.0020	mg/L	1	05/06/2023 6:43	205805
Calcium	NELAP	0.0350	0.100		124	mg/L	1	05/06/2023 6:43	205805
Chromium	NELAP	0.0028	0.0050		0.0158	mg/L	1	05/06/2023 6:43	205805
Lead	NELAP	0.0040	0.0075		< 0.0075	mg/L	1	05/06/2023 6:43	205805
Lithium	NELAP	0.0190	0.0500		< 0.0500	mg/L	10	05/13/2023 14:45	205805
Magnesium	NELAP	0.0055	0.0500		36.9	mg/L	1	05/06/2023 6:43	205805
Molybdenum	NELAP	0.0037	0.0100		< 0.0100	mg/L	1	05/06/2023 6:43	205805
Potassium	NELAP	0.0400	0.100		5.42	mg/L	1	05/06/2023 6:43	205805
Sodium	NELAP	0.0180	0.0500		77.5	mg/L	1	05/06/2023 6:43	205805
<i>Elevated reporting limit due to high levels of target and non-target analytes.</i>									
<i>CCV recovered outside the upper control limits for Li. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	05/05/2023 14:04	205805
Cobalt	NELAP	0.0001	0.0010		0.0058	mg/L	5	05/05/2023 14:04	205805
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	05/05/2023 14:04	205805
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	05/05/2023 14:04	205805



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041536-009  
**Matrix:** GROUNDWATER

**Work Order:** 23041536  
**Report Date:** 19-Jun-23  
**Client Sample ID:** JOP\_G010  
**Collection Date:** 05/03/2023 15:12

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	05/05/2023 12:53	205809



Client: Ramboll  
Client Project: JOP-23Q2  
Lab ID: 23041536-010  
Matrix: GROUNDWATER

Work Order: 23041536  
Report Date: 19-Jun-23

Client Sample ID: JOP\_G011

Collection Date: 05/03/2023 10:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		45.10	ft	1	05/03/2023 10:10	R328720
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		21	NTU	1	05/03/2023 10:10	R328720
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		207	mV	1	05/03/2023 10:10	R328720
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		1520	µS/cm	1	05/03/2023 10:10	R328720
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		16.5	°C	1	05/03/2023 10:10	R328720
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		1.58	mg/L	1	05/03/2023 10:10	R328720
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		5.82		1	05/03/2023 10:10	R328720
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		81	mg/L	1	05/05/2023 15:40	R328395
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	05/05/2023 15:40	R328395
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		808	mg/L	1	05/08/2023 11:14	R328528
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		416	mg/L	10	05/10/2023 16:49	R328607
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.20	mg/L	1	05/09/2023 12:16	R328523
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		37	mg/L	1	05/10/2023 16:44	R328580
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Arsenic	NELAP	0.0087	0.0100		< 0.0100	mg/L	1	05/06/2023 6:47	205805
Barium	NELAP	0.0007	0.0025		0.0770	mg/L	1	05/06/2023 6:47	205805
Beryllium	NELAP	0.0002	0.0005		0.0005	mg/L	1	05/06/2023 6:47	205805
Boron	NELAP	0.0090	0.0200		0.373	mg/L	1	05/06/2023 6:47	205805
Cadmium	NELAP	0.0005	0.0020		< 0.0020	mg/L	1	05/06/2023 6:47	205805
Calcium	NELAP	0.0350	0.100		122	mg/L	1	05/06/2023 6:47	205805
Chromium	NELAP	0.0028	0.0050		0.0063	mg/L	1	05/06/2023 6:47	205805
Lead	NELAP	0.0040	0.0075		< 0.0075	mg/L	1	05/06/2023 6:47	205805
Lithium	NELAP	0.0190	0.0500		< 0.0500	mg/L	10	05/13/2023 14:48	205805
Magnesium	NELAP	0.0055	0.0500		43.2	mg/L	1	05/06/2023 6:47	205805
Molybdenum	NELAP	0.0037	0.0100		< 0.0100	mg/L	1	05/06/2023 6:47	205805
Potassium	NELAP	0.0400	0.100		1.03	mg/L	1	05/06/2023 6:47	205805
Sodium	NELAP	0.0180	0.0500		62.5	mg/L	1	05/06/2023 6:47	205805
<i>Elevated reporting limit due to high levels of target and non-target analytes.</i>									
<i>CCV recovered outside the upper control limits for Li. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	05/05/2023 14:10	205805
Cobalt	NELAP	0.0001	0.0010		0.0185	mg/L	5	05/05/2023 14:10	205805
Selenium	NELAP	0.0006	0.0010		0.0098	mg/L	5	05/05/2023 14:10	205805
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	05/05/2023 14:10	205805





**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041536-010  
**Matrix:** GROUNDWATER

**Work Order:** 23041536  
**Report Date:** 19-Jun-23  
**Client Sample ID:** JOP\_G011  
**Collection Date:** 05/03/2023 10:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	05/05/2023 12:56	205809



Client: Ramboll  
Client Project: JOP-23Q2  
Lab ID: 23041536-011  
Matrix: GROUNDWATER

Work Order: 23041536  
Report Date: 19-Jun-23  
Client Sample ID: JOP\_G051&D  
Collection Date: 05/03/2023 9:28

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		41.82	ft	1	05/03/2023 9:28	R328720
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		31	NTU	1	05/03/2023 9:28	R328720
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		214	mV	1	05/03/2023 9:28	R328720
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		514	µS/cm	1	05/03/2023 9:28	R328720
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		16.3	°C	1	05/03/2023 9:28	R328720
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		1.79	mg/L	1	05/03/2023 9:28	R328720
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		5.57		1	05/03/2023 9:28	R328720
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0	0		148	mg/L	1	05/04/2023 17:17	R328332
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO3)	NELAP	0	0		0	mg/L	1	05/04/2023 17:17	R328332
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		310	mg/L	1	05/08/2023 11:14	R328528
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	12	20		59	mg/L	2	05/10/2023 16:55	R328607
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.27	mg/L	1	05/09/2023 12:18	R328523
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	8		11	mg/L	2	05/10/2023 16:55	R328580
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Arsenic	NELAP	0.0087	0.0100		< 0.0100	mg/L	1	05/06/2023 6:50	205805
Barium	NELAP	0.0007	0.0025		0.273	mg/L	1	05/06/2023 6:50	205805
Beryllium	NELAP	0.0002	0.0005		< 0.0005	mg/L	1	05/06/2023 6:50	205805
Boron	NELAP	0.0090	0.0200		0.0297	mg/L	1	05/06/2023 6:50	205805
Cadmium	NELAP	0.0005	0.0020		< 0.0020	mg/L	1	05/06/2023 6:50	205805
Calcium	NELAP	0.0350	0.100		48.2	mg/L	1	05/06/2023 6:50	205805
Chromium	NELAP	0.0028	0.0050		< 0.0050	mg/L	1	05/06/2023 6:50	205805
Lead	NELAP	0.0040	0.0075		< 0.0075	mg/L	1	05/06/2023 6:50	205805
Lithium	NELAP	0.0190	0.0500		< 0.0500	mg/L	10	05/13/2023 14:52	205805
Magnesium	NELAP	0.0055	0.0500		14.3	mg/L	1	05/06/2023 6:50	205805
Molybdenum	NELAP	0.0037	0.0100		< 0.0100	mg/L	1	05/06/2023 6:50	205805
Potassium	NELAP	0.0400	0.100		0.693	mg/L	1	05/06/2023 6:50	205805
Sodium	NELAP	0.0180	0.0500		28.6	mg/L	1	05/06/2023 6:50	205805
<i>Elevated reporting limit due to high levels of target and non-target analytes.</i>									
<i>CCV recovered outside the upper control limits for Li. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010	J	0.0005	mg/L	5	05/05/2023 14:17	205805
Cobalt	NELAP	0.0001	0.0010		0.0093	mg/L	5	05/05/2023 14:17	205805
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	05/05/2023 14:17	205805
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	05/05/2023 14:17	205805



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041536-011  
**Matrix:** GROUNDWATER

**Work Order:** 23041536  
**Report Date:** 19-Jun-23  
**Client Sample ID:** JOP\_G051&D  
**Collection Date:** 05/03/2023 9:28

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	05/05/2023 12:58	205809



Client: Ramboll  
Client Project: JOP-23Q2  
Lab ID: 23041536-012  
Matrix: GROUNDWATER

Work Order: 23041536  
Report Date: 19-Jun-23  
Client Sample ID: JOP\_G052&D  
Collection Date: 05/03/2023 14:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		27.12	ft	1	05/03/2023 14:08	R328720
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		< 1.0	NTU	1	05/03/2023 14:08	R328720
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		68	mV	1	05/03/2023 14:08	R328720
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		572	µS/cm	1	05/03/2023 14:08	R328720
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		16.7	°C	1	05/03/2023 14:08	R328720
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		1.35	mg/L	1	05/03/2023 14:08	R328720
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.31		1	05/03/2023 14:08	R328720
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		53	mg/L	1	05/11/2023 9:19	R328650
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	05/11/2023 9:19	R328650
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		296	mg/L	1	05/08/2023 11:14	R328528
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		129	mg/L	10	05/10/2023 17:37	R328607
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10	J	0.10	mg/L	1	05/09/2023 12:26	R328523
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		5	mg/L	1	05/10/2023 17:32	R328580
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Arsenic	NELAP	0.0087	0.0100		< 0.0100	mg/L	1	05/13/2023 16:10	205805
Barium	NELAP	0.0007	0.0025		0.0461	mg/L	1	05/13/2023 16:10	205805
Beryllium	NELAP	0.0002	0.0005		< 0.0005	mg/L	1	05/17/2023 10:29	205805
Boron	NELAP	0.0090	0.0200		0.682	mg/L	1	05/13/2023 16:10	205805
Cadmium	NELAP	0.0005	0.0020		< 0.0020	mg/L	1	05/06/2023 7:13	205805
Calcium	NELAP	0.0350	0.100		28.8	mg/L	1	05/13/2023 16:10	205805
Chromium	NELAP	0.0028	0.0050		< 0.0050	mg/L	1	05/06/2023 7:13	205805
Lead	NELAP	0.0040	0.0075		< 0.0075	mg/L	1	05/06/2023 7:13	205805
Lithium	NELAP	0.0019	0.0050		< 0.0050	mg/L	1	05/13/2023 16:10	205805
Magnesium	NELAP	0.0055	0.0500		12.1	mg/L	1	05/17/2023 10:29	205805
Molybdenum	NELAP	0.0037	0.0100		< 0.0100	mg/L	1	05/06/2023 7:13	205805
Potassium	NELAP	0.0400	0.100		0.493	mg/L	1	05/06/2023 7:13	205805
Sodium	NELAP	0.0180	0.0500		36.1	mg/L	1	05/06/2023 7:13	205805
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	05/05/2023 14:23	205805
Cobalt	NELAP	0.0001	0.0010		0.0024	mg/L	5	05/05/2023 14:23	205805
Selenium	NELAP	0.0006	0.0010		0.0075	mg/L	5	05/05/2023 14:23	205805
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	05/05/2023 14:23	205805



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041536-012  
**Matrix:** GROUNDWATER

**Work Order:** 23041536  
**Report Date:** 19-Jun-23  
**Client Sample ID:** JOP\_G052&D  
**Collection Date:** 05/03/2023 14:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	05/05/2023 13:00	205809



Client: Ramboll  
Client Project: JOP-23Q2  
Lab ID: 23041536-013  
Matrix: GROUNDWATER

Work Order: 23041536  
Report Date: 19-Jun-23  
Client Sample ID: JOP\_G053&D  
Collection Date: 05/03/2023 16:18

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		35.75	ft	1	05/03/2023 16:18	R328720
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		< 1.0	NTU	1	05/03/2023 16:18	R328720
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		137	mV	1	05/03/2023 16:18	R328720
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		645	µS/cm	1	05/03/2023 16:18	R328720
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		16.7	°C	1	05/03/2023 16:18	R328720
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.84	mg/L	1	05/03/2023 16:18	R328720
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.48		1	05/03/2023 16:18	R328720
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		170	mg/L	1	05/04/2023 17:22	R328332
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	05/04/2023 17:22	R328332
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		314	mg/L	1	05/08/2023 11:14	R328528
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	12	20		68	mg/L	2	05/10/2023 17:40	R328607
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.71	mg/L	1	05/09/2023 12:28	R328523
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	8		18	mg/L	2	05/10/2023 17:40	R328580
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Arsenic	NELAP	0.0087	0.0100		< 0.0100	mg/L	1	05/13/2023 16:14	205805
Barium	NELAP	0.0007	0.0025		0.102	mg/L	1	05/13/2023 16:14	205805
Beryllium	NELAP	0.0002	0.0005		< 0.0005	mg/L	1	05/17/2023 10:29	205805
Boron	NELAP	0.0090	0.0200		0.367	mg/L	1	05/13/2023 16:14	205805
Cadmium	NELAP	0.0005	0.0020		< 0.0020	mg/L	1	05/06/2023 7:16	205805
Calcium	NELAP	0.0350	0.100		34.3	mg/L	1	05/17/2023 10:29	205805
Chromium	NELAP	0.0028	0.0050		< 0.0050	mg/L	1	05/06/2023 7:16	205805
Lead	NELAP	0.0040	0.0075		< 0.0075	mg/L	1	05/06/2023 7:16	205805
Lithium	NELAP	0.0019	0.0050		< 0.0050	mg/L	1	05/13/2023 16:14	205805
Magnesium	NELAP	0.0055	0.0500		15.3	mg/L	1	05/17/2023 10:29	205805
Molybdenum	NELAP	0.0037	0.0100		< 0.0100	mg/L	1	05/06/2023 7:16	205805
Potassium	NELAP	0.0400	0.100		0.332	mg/L	1	05/06/2023 7:16	205805
Sodium	NELAP	0.0180	0.0500		53.1	mg/L	1	05/06/2023 7:16	205805
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	05/05/2023 14:29	205805
Cobalt	NELAP	0.0001	0.0010		0.0018	mg/L	5	05/05/2023 14:29	205805
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	05/05/2023 14:29	205805
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	05/05/2023 14:29	205805



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041536-013  
**Matrix:** GROUNDWATER

**Work Order:** 23041536  
**Report Date:** 19-Jun-23  
**Client Sample ID:** JOP\_G053&D  
**Collection Date:** 05/03/2023 16:18

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	05/05/2023 13:03	205809





Client: Ramboll  
Client Project: JOP-23Q2  
Lab ID: 23041536-014  
Matrix: GROUNDWATER

Work Order: 23041536  
Report Date: 19-Jun-23  
Client Sample ID: JOP\_G054&D  
Collection Date: 05/03/2023 12:18

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		41.25	ft	1	05/03/2023 12:18	R328720
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		4.1	NTU	1	05/03/2023 12:18	R328720
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		42	mV	1	05/03/2023 12:18	R328720
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		1030	µS/cm	1	05/03/2023 12:18	R328720
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		16.4	°C	1	05/03/2023 12:18	R328720
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		1.68	mg/L	1	05/03/2023 12:18	R328720
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.80		1	05/03/2023 12:18	R328720
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		206	mg/L	1	05/04/2023 17:27	R328332
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	05/04/2023 17:27	R328332
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		544	mg/L	1	05/08/2023 11:49	R328528
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		194	mg/L	10	05/10/2023 17:53	R328607
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.30	mg/L	1	05/09/2023 12:30	R328523
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		22	mg/L	1	05/10/2023 17:48	R328580
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Arsenic	NELAP	0.0087	0.0100		< 0.0100	mg/L	1	05/13/2023 15:18	205805
Barium	NELAP	0.0007	0.0025		0.0794	mg/L	1	05/13/2023 15:18	205805
Beryllium	NELAP	0.0002	0.0005		< 0.0005	mg/L	1	05/17/2023 10:30	205805
Boron	NELAP	0.0090	0.0200		0.555	mg/L	1	05/13/2023 15:18	205805
Cadmium	NELAP	0.0005	0.0020		< 0.0020	mg/L	1	05/06/2023 7:20	205805
Calcium	NELAP	0.0350	0.100		81.5	mg/L	1	05/17/2023 10:30	205805
Chromium	NELAP	0.0028	0.0050		< 0.0050	mg/L	1	05/06/2023 7:20	205805
Lead	NELAP	0.0040	0.0075		< 0.0075	mg/L	1	05/06/2023 7:20	205805
Lithium	NELAP	0.0019	0.0050		< 0.0050	mg/L	1	05/13/2023 15:18	205805
Magnesium	NELAP	0.0055	0.0500		26.4	mg/L	1	05/17/2023 10:30	205805
Molybdenum	NELAP	0.0037	0.0100		< 0.0100	mg/L	1	05/06/2023 7:20	205805
Potassium	NELAP	0.0400	0.100		1.21	mg/L	1	05/06/2023 7:20	205805
Sodium	NELAP	0.0180	0.0500		57.0	mg/L	1	05/06/2023 7:20	205805
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	05/05/2023 15:02	205805
Cobalt	NELAP	0.0001	0.0010		0.0106	mg/L	5	05/05/2023 15:02	205805
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	05/05/2023 15:02	205805
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	05/05/2023 15:02	205805



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041536-014  
**Matrix:** GROUNDWATER

**Work Order:** 23041536  
**Report Date:** 19-Jun-23  
**Client Sample ID:** JOP\_G054&D  
**Collection Date:** 05/03/2023 12:18

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	05/05/2023 13:05	205809



Client: Ramboll  
Client Project: JOP-23Q2  
Lab ID: 23041536-020  
Matrix: AQUEOUS

Work Order: 23041536  
Report Date: 19-Jun-23  
Client Sample ID: Field Blank  
Collection Date: 05/03/2023 18:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	05/11/2023 10:01	R328650
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	05/11/2023 10:01	R328650
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		< 20	mg/L	1	05/08/2023 11:50	R328528
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	6	10		< 10	mg/L	1	05/10/2023 18:36	R328607
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		< 0.10	mg/L	1	05/09/2023 12:52	R328523
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		< 4	mg/L	1	05/10/2023 18:36	R328580
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Arsenic	NELAP	0.0087	0.0100		< 0.0100	mg/L	1	05/13/2023 15:33	205805
Barium	NELAP	0.0007	0.0025		< 0.0025	mg/L	1	05/13/2023 15:33	205805
Beryllium	NELAP	0.0002	0.0005		< 0.0005	mg/L	1	05/17/2023 15:01	205805
Boron	NELAP	0.0090	0.0200		< 0.0200	mg/L	1	05/17/2023 15:01	205805
Cadmium	NELAP	0.0005	0.0020		< 0.0020	mg/L	1	05/06/2023 7:35	205805
Calcium	NELAP	0.035	0.10	J	0.044	mg/L	1	05/13/2023 15:33	205805
Chromium	NELAP	0.0028	0.0050		< 0.0050	mg/L	1	05/06/2023 7:35	205805
Lead	NELAP	0.0040	0.0075		< 0.0075	mg/L	1	05/06/2023 7:35	205805
Lithium	NELAP	0.0019	0.0050		< 0.0050	mg/L	1	05/13/2023 15:33	205805
Magnesium	NELAP	0.0055	0.0500		< 0.0500	mg/L	1	05/13/2023 15:33	205805
Molybdenum	NELAP	0.0037	0.0100		< 0.0100	mg/L	1	05/06/2023 7:35	205805
Potassium	NELAP	0.0400	0.100		< 0.100	mg/L	1	05/06/2023 7:35	205805
Sodium	NELAP	0.018	0.050	J	0.031	mg/L	1	05/06/2023 7:35	205805
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	05/05/2023 15:27	205805
Cobalt	NELAP	0.0001	0.0010		< 0.0010	mg/L	5	05/05/2023 15:27	205805
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	05/05/2023 15:27	205805
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	05/05/2023 15:27	205805
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	05/05/2023 13:19	205809



## Sample Summary

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

**Client:** Ramboll  
**Client Project:** JOP-23Q2

**Work Order:** 23041536  
**Report Date:** 19-Jun-23

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
23041536-001	JOP_G001&D	Groundwater	7	05/02/2023 9:26
23041536-002	JOP_G002&D	Groundwater	7	05/03/2023 8:49
23041536-003	JOP_G003	Groundwater	7	05/03/2023 8:08
23041536-004	JOP_G005	Groundwater	7	05/03/2023 17:01
23041536-005	JOP_G006	Groundwater	7	05/03/2023 17:35
23041536-006	JOP_G007	Groundwater	7	05/03/2023 18:12
23041536-007	JOP_G008	Groundwater	7	05/03/2023 15:45
23041536-008	JOP_G009	Groundwater	7	05/03/2023 13:13
23041536-009	JOP_G010	Groundwater	7	05/03/2023 15:12
23041536-010	JOP_G011	Groundwater	7	05/03/2023 10:10
23041536-011	JOP_G051&D	Groundwater	7	05/03/2023 9:28
23041536-012	JOP_G052&D	Groundwater	7	05/03/2023 14:08
23041536-013	JOP_G053&D	Groundwater	7	05/03/2023 16:18
23041536-014	JOP_G054&D	Groundwater	7	05/03/2023 12:18
23041536-020	Field Blank	Aqueous	7	05/03/2023 18:45



## Dates Report

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
23041536-001A	JOP_G001&D	05/02/2023 9:26	05/04/2023 8:10		
	Field Elevation Measurements				05/02/2023 9:26
	Standard Methods 2130 B Field				05/02/2023 9:26
	Standard Methods 18th Ed. 2580 B Field				05/02/2023 9:26
	Standard Methods 2320 B (Total) 1997, 2011				05/04/2023 16:38
	Standard Methods 2320 B 1997, 2011				05/04/2023 16:38
	Standard Methods 2510 B Field				05/02/2023 9:26
	Standard Methods 2540 C (Total) 1997, 2011				05/06/2023 10:14
	Standard Methods 2550 B Field				05/02/2023 9:26
	Standard Methods 4500-NO2 B (Total) 2000, 2011				05/05/2023 13:32
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 15:46
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 15:46
	Standard Methods 4500-O G Field				05/02/2023 9:26
	Standard Methods 4500-P E 1999				05/04/2023 20:46
	Standard Methods 4500-P E 1999, 2011				05/05/2023 12:46
	SW-846 9036 (Total)				05/10/2023 14:46
	SW-846 9040B Field				05/02/2023 9:26
	SW-846 9214 (Total)				05/09/2023 11:51
	SW-846 9251 (Total)				05/10/2023 14:47
23041536-001B	JOP_G001&D	05/02/2023 9:26	05/04/2023 8:10		
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 16:50
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 16:50
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				05/05/2023 13:34
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 20:52
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 20:52
	Standard Methods 4500-P E (Dissolved) 1999, 2011				05/05/2023 12:02
	Standard Methods 4500-P E (Dissolved) 1999				05/04/2023 20:46
	SW-846 9036 (Dissolved)				05/08/2023 11:47
	SW-846 9251 (Dissolved)				05/08/2023 11:48
23041536-001C	JOP_G001&D	05/02/2023 9:26	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/06/2023 5:47
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/13/2023 13:53
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			05/04/2023 13:44	05/05/2023 12:28
	SW-846 7470A (Total)			05/05/2023 8:10	05/05/2023 12:26
23041536-001D	JOP_G001&D	05/02/2023 9:26	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/05/2023 9:53
23041536-001E	JOP_G001&D	05/02/2023 9:26	05/04/2023 8:10		



## Dates Report

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	SW-846 9060				05/09/2023 21:30
23041536-001F	JOP_G001&D	05/02/2023 9:26	05/04/2023 8:10		
	SW-846 9060				05/09/2023 12:02
23041536-001G	JOP_G001&D	05/02/2023 9:26	05/04/2023 8:10		
	Ferrous Iron by CHEMets Kit				05/02/2023 9:26
23041536-002A	JOP_G002&D	05/03/2023 8:49	05/04/2023 8:10		
	Field Elevation Measurements				05/03/2023 8:49
	Standard Methods 2130 B Field				05/03/2023 8:49
	Standard Methods 18th Ed. 2580 B Field				05/03/2023 8:49
	Standard Methods 2320 B (Total) 1997, 2011				05/04/2023 16:48
	Standard Methods 2320 B 1997, 2011				05/04/2023 16:48
	Standard Methods 2510 B Field				05/03/2023 8:49
	Standard Methods 2540 C (Total) 1997, 2011				05/08/2023 10:24
	Standard Methods 2550 B Field				05/03/2023 8:49
	Standard Methods 4500-NO2 B (Total) 2000, 2011				05/05/2023 7:52
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:02
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:02
	Standard Methods 4500-O G Field				05/03/2023 8:49
	Standard Methods 4500-P E 1999				05/04/2023 20:46
	Standard Methods 4500-P E 1999, 2011				05/04/2023 20:48
	SW-846 9036 (Total)				05/10/2023 14:55
	SW-846 9040B Field				05/03/2023 8:49
	SW-846 9214 (Total)				05/09/2023 11:53
	SW-846 9251 (Total)				05/10/2023 14:55
23041536-002B	JOP_G002&D	05/03/2023 8:49	05/04/2023 8:10		
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 14:33
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 14:33
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				05/05/2023 7:52
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 20:54
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 20:54
	Standard Methods 4500-P E (Dissolved) 1999, 2011				05/12/2023 15:02
	Standard Methods 4500-P E (Dissolved) 1999				05/12/2023 14:57
	SW-846 9036 (Dissolved)				05/08/2023 11:58
	SW-846 9251 (Dissolved)				05/08/2023 11:58
23041536-002C	JOP_G002&D	05/03/2023 8:49	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/06/2023 5:51
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/13/2023 13:56



## Dates Report

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	<b>Test Name</b>				
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			05/04/2023 13:44	05/05/2023 12:35
	SW-846 7470A (Total)			05/05/2023 8:10	05/05/2023 12:28
23041536-002D	JOP_G002&D	05/03/2023 8:49	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/05/2023 9:54
23041536-002E	JOP_G002&D	05/03/2023 8:49	05/04/2023 8:10		
	SW-846 9060				05/09/2023 21:49
23041536-002F	JOP_G002&D	05/03/2023 8:49	05/04/2023 8:10		
	SW-846 9060				05/09/2023 12:52
23041536-002G	JOP_G002&D	05/03/2023 8:49	05/04/2023 8:10		
	Ferrous Iron by CHEMets Kit				05/03/2023 8:49
23041536-003A	JOP_G003	05/03/2023 8:08	05/04/2023 8:10		
	Field Elevation Measurements				05/03/2023 8:08
	Standard Methods 2130 B Field				05/03/2023 8:08
	Standard Methods 18th Ed. 2580 B Field				05/03/2023 8:08
	Standard Methods 2320 B (Total) 1997, 2011				05/04/2023 16:52
	Standard Methods 2320 B 1997, 2011				05/04/2023 16:52
	Standard Methods 2510 B Field				05/03/2023 8:08
	Standard Methods 2540 C (Total) 1997, 2011				05/08/2023 10:24
	Standard Methods 2550 B Field				05/03/2023 8:08
	Standard Methods 4500-NO2 B (Total) 2000, 2011				05/04/2023 20:51
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:04
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:04
	Standard Methods 4500-O G Field				05/03/2023 8:08
	Standard Methods 4500-P E 1999				05/04/2023 15:58
	Standard Methods 4500-P E 1999, 2011				05/04/2023 18:43
	SW-846 9036 (Total)				05/10/2023 15:16
	SW-846 9040B Field				05/03/2023 8:08
	SW-846 9214 (Total)				05/09/2023 11:55
	SW-846 9251 (Total)				05/10/2023 15:05
23041536-003B	JOP_G003	05/03/2023 8:08	05/04/2023 8:10		
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 14:38
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 14:38
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				05/05/2023 7:52
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 20:57
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 20:57
	Standard Methods 4500-P E (Dissolved) 1999, 2011				05/04/2023 19:29
	Standard Methods 4500-P E (Dissolved) 1999				05/04/2023 15:58





## Dates Report

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	SW-846 9036 (Dissolved)				05/10/2023 11:19
	SW-846 9251 (Dissolved)				05/08/2023 12:19
23041536-003C	JOP_G003	05/03/2023 8:08	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/06/2023 5:55
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/13/2023 14:00
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			05/04/2023 13:44	05/05/2023 13:32
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			05/04/2023 13:44	05/08/2023 15:31
	SW-846 7470A (Total)			05/05/2023 8:10	05/05/2023 12:31
23041536-003D	JOP_G003	05/03/2023 8:08	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/05/2023 10:17
23041536-003E	JOP_G003	05/03/2023 8:08	05/04/2023 8:10		
	SW-846 9060				05/09/2023 22:27
23041536-003F	JOP_G003	05/03/2023 8:08	05/04/2023 8:10		
	SW-846 9060				05/09/2023 12:59
23041536-003G	JOP_G003	05/03/2023 8:08	05/04/2023 8:10		
	Ferrous Iron by CHEMets Kit				05/03/2023 8:08
23041536-004A	JOP_G005	05/03/2023 17:01	05/04/2023 8:10		
	Field Elevation Measurements				05/03/2023 17:01
	Standard Methods 2130 B Field				05/03/2023 17:01
	Standard Methods 18th Ed. 2580 B Field				05/03/2023 17:01
	Standard Methods 2320 B (Total) 1997, 2011				05/11/2023 9:03
	Standard Methods 2320 B 1997, 2011				05/11/2023 9:03
	Standard Methods 2510 B Field				05/03/2023 17:01
	Standard Methods 2540 C (Total) 1997, 2011				05/08/2023 11:12
	Standard Methods 2550 B Field				05/03/2023 17:01
	Standard Methods 4500-NO2 B (Total) 2000, 2011				05/05/2023 13:32
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:06
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:06
	Standard Methods 4500-O G Field				05/03/2023 17:01
	Standard Methods 4500-P E 1999				05/04/2023 20:46
	Standard Methods 4500-P E 1999, 2011				05/05/2023 12:47
	SW-846 9036 (Total)				05/10/2023 15:48
	SW-846 9040B Field				05/03/2023 17:01
	SW-846 9214 (Total)				05/09/2023 11:56
	SW-846 9251 (Total)				05/10/2023 15:43
23041536-004B	JOP_G005	05/03/2023 17:01	05/04/2023 8:10		
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 16:02



## Dates Report

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 16:02
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				05/05/2023 14:08
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 17:12
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 17:12
	Standard Methods 4500-P E (Dissolved) 1999, 2011				05/05/2023 14:01
	Standard Methods 4500-P E (Dissolved) 1999				05/04/2023 20:46
	SW-846 9036 (Dissolved)				05/08/2023 12:49
	SW-846 9251 (Dissolved)				05/08/2023 12:43
23041536-004C	JOP_G005	05/03/2023 17:01	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/06/2023 5:59
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/13/2023 14:04
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			05/04/2023 13:44	05/05/2023 13:39
	SW-846 7470A (Total)			05/05/2023 8:10	05/05/2023 12:33
23041536-004D	JOP_G005	05/03/2023 17:01	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/05/2023 10:18
23041536-004E	JOP_G005	05/03/2023 17:01	05/04/2023 8:10		
	SW-846 9060				05/09/2023 22:33
23041536-004F	JOP_G005	05/03/2023 17:01	05/04/2023 8:10		
	SW-846 9060				05/09/2023 13:05
23041536-004G	JOP_G005	05/03/2023 17:01	05/04/2023 8:10		
	Ferrous Iron by CHEMets Kit				05/03/2023 17:01
23041536-005A	JOP_G006	05/03/2023 17:35	05/04/2023 8:10		
	Field Elevation Measurements				05/03/2023 17:35
	Standard Methods 2130 B Field				05/03/2023 17:35
	Standard Methods 18th Ed. 2580 B Field				05/03/2023 17:35
	Standard Methods 2320 B (Total) 1997, 2011				05/04/2023 16:56
	Standard Methods 2320 B 1997, 2011				05/04/2023 16:56
	Standard Methods 2510 B Field				05/03/2023 17:35
	Standard Methods 2540 C (Total) 1997, 2011				05/08/2023 11:12
	Standard Methods 2550 B Field				05/03/2023 17:35
	Standard Methods 4500-NO2 B (Total) 2000, 2011				05/05/2023 13:33
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:15
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:15
	Standard Methods 4500-O G Field				05/03/2023 17:35
	Standard Methods 4500-P E 1999				05/04/2023 20:46
	Standard Methods 4500-P E 1999, 2011				05/05/2023 12:49
	SW-846 9036 (Total)				05/10/2023 15:56



## Dates Report

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	SW-846 9040B Field				05/03/2023 17:35
	SW-846 9214 (Total)				05/09/2023 11:59
	SW-846 9251 (Total)				05/10/2023 15:51
23041536-005B	JOP_G006	05/03/2023 17:35	05/04/2023 8:10		
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 16:19
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 16:19
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				05/05/2023 14:08
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 17:14
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 17:14
	Standard Methods 4500-P E (Dissolved) 1999, 2011				05/05/2023 14:01
	Standard Methods 4500-P E (Dissolved) 1999				05/04/2023 20:46
	SW-846 9036 (Dissolved)				05/08/2023 12:57
	SW-846 9251 (Dissolved)				05/08/2023 12:51
23041536-005C	JOP_G006	05/03/2023 17:35	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/06/2023 6:25
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/15/2023 12:35
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			05/04/2023 13:44	05/05/2023 15:33
	SW-846 7470A (Total)			05/05/2023 8:10	05/05/2023 12:35
23041536-005D	JOP_G006	05/03/2023 17:35	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/05/2023 10:20
23041536-005E	JOP_G006	05/03/2023 17:35	05/04/2023 8:10		
	SW-846 9060				05/09/2023 22:40
23041536-005F	JOP_G006	05/03/2023 17:35	05/04/2023 8:10		
	SW-846 9060				05/09/2023 13:11
23041536-005G	JOP_G006	05/03/2023 17:35	05/04/2023 8:10		
	Ferrous Iron by CHEMets Kit				05/03/2023 17:35
23041536-006A	JOP_G007	05/03/2023 18:12	05/04/2023 8:10		
	Field Elevation Measurements				05/03/2023 18:12
	Standard Methods 2130 B Field				05/03/2023 18:12
	Standard Methods 18th Ed. 2580 B Field				05/03/2023 18:12
	Standard Methods 2320 B (Total) 1997, 2011				05/11/2023 9:08
	Standard Methods 2320 B 1997, 2011				05/11/2023 9:08
	Standard Methods 2510 B Field				05/03/2023 18:12
	Standard Methods 2540 C (Total) 1997, 2011				05/08/2023 11:12
	Standard Methods 2550 B Field				05/03/2023 18:12
	Standard Methods 4500-NO2 B (Total) 2000, 2011				05/05/2023 13:33
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:17



## Dates Report

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:17
	Standard Methods 4500-O G Field				05/03/2023 18:12
	Standard Methods 4500-P E 1999				05/04/2023 20:46
	Standard Methods 4500-P E 1999, 2011				05/05/2023 12:50
	SW-846 9036 (Total)				05/10/2023 16:04
	SW-846 9040B Field				05/03/2023 18:12
	SW-846 9214 (Total)				05/09/2023 12:00
	SW-846 9251 (Total)				05/10/2023 15:59
23041536-006B	JOP_G007	05/03/2023 18:12	05/04/2023 8:10		
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 16:24
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 16:24
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				05/05/2023 14:08
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 17:17
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 17:17
	Standard Methods 4500-P E (Dissolved) 1999, 2011				05/05/2023 14:02
	Standard Methods 4500-P E (Dissolved) 1999				05/04/2023 20:46
	SW-846 9036 (Dissolved)				05/08/2023 13:04
	SW-846 9251 (Dissolved)				05/08/2023 12:59
23041536-006C	JOP_G007	05/03/2023 18:12	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/06/2023 6:02
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/13/2023 14:07
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			05/04/2023 13:44	05/05/2023 13:45
	SW-846 7470A (Total)			05/05/2023 8:10	05/05/2023 12:37
23041536-006D	JOP_G007	05/03/2023 18:12	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/05/2023 10:25
23041536-006E	JOP_G007	05/03/2023 18:12	05/04/2023 8:10		
	SW-846 9060				05/09/2023 22:46
23041536-006F	JOP_G007	05/03/2023 18:12	05/04/2023 8:10		
	SW-846 9060				05/09/2023 13:18
23041536-006G	JOP_G007	05/03/2023 18:12	05/04/2023 8:10		
	Ferrous Iron by CHEMets Kit				05/03/2023 18:12
23041536-007A	JOP_G008	05/03/2023 15:45	05/04/2023 8:10		
	Field Elevation Measurements				05/03/2023 15:45
	Standard Methods 2130 B Field				05/03/2023 15:45
	Standard Methods 18th Ed. 2580 B Field				05/03/2023 15:45
	Standard Methods 2320 B (Total) 1997, 2011				05/04/2023 17:08
	Standard Methods 2320 B 1997, 2011				05/04/2023 17:08



## Dates Report

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

**Client:** Ramboll  
**Client Project:** JOP-23Q2

**Work Order:** 23041536  
**Report Date:** 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
	Standard Methods 2510 B Field				05/03/2023 15:45
	Standard Methods 2540 C (Total) 1997, 2011				05/09/2023 12:36
	Standard Methods 2550 B Field				05/03/2023 15:45
	Standard Methods 4500-NO2 B (Total) 2000, 2011				05/05/2023 13:33
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:19
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:19
	Standard Methods 4500-O G Field				05/03/2023 15:45
	Standard Methods 4500-P E 1999				05/04/2023 20:46
	Standard Methods 4500-P E 1999, 2011				05/05/2023 12:50
	SW-846 9036 (Total)				05/10/2023 16:12
	SW-846 9040B Field				05/03/2023 15:45
	SW-846 9214 (Total)				05/09/2023 12:02
	SW-846 9251 (Total)				05/10/2023 16:07
23041536-007B	JOP_G008	05/03/2023 15:45	05/04/2023 8:10		
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 16:29
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 16:29
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				05/05/2023 14:07
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 17:19
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 17:19
	Standard Methods 4500-P E (Dissolved) 1999, 2011				05/05/2023 14:03
	Standard Methods 4500-P E (Dissolved) 1999				05/04/2023 20:46
	SW-846 9036 (Dissolved)				05/08/2023 13:12
	SW-846 9251 (Dissolved)				05/08/2023 13:07
23041536-007C	JOP_G008	05/03/2023 15:45	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/06/2023 6:36
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/13/2023 14:11
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			05/04/2023 13:44	05/05/2023 13:51
	SW-846 7470A (Total)			05/05/2023 8:10	05/05/2023 12:40
23041536-007D	JOP_G008	05/03/2023 15:45	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/05/2023 10:26
23041536-007E	JOP_G008	05/03/2023 15:45	05/04/2023 8:10		
	SW-846 9060				05/09/2023 22:52
23041536-007F	JOP_G008	05/03/2023 15:45	05/04/2023 8:10		
	SW-846 9060				05/09/2023 13:24
23041536-007G	JOP_G008	05/03/2023 15:45	05/04/2023 8:10		
	Ferrous Iron by CHEMets Kit				05/03/2023 15:45
23041536-008A	JOP_G009	05/03/2023 13:13	05/04/2023 8:10		



## Dates Report

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
	Field Elevation Measurements				05/03/2023 13:13
	Standard Methods 2130 B Field				05/03/2023 13:13
	Standard Methods 18th Ed. 2580 B Field				05/03/2023 13:13
	Standard Methods 2320 B (Total) 1997, 2011				05/04/2023 17:12
	Standard Methods 2320 B 1997, 2011				05/04/2023 17:12
	Standard Methods 2510 B Field				05/03/2023 13:13
	Standard Methods 2540 C (Total) 1997, 2011				05/19/2023 12:38
	Standard Methods 2550 B Field				05/03/2023 13:13
	Standard Methods 4500-NO2 B (Total) 2000, 2011				05/05/2023 12:47
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:22
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:22
	Standard Methods 4500-O G Field				05/03/2023 13:13
	Standard Methods 4500-P E 1999				05/04/2023 20:46
	Standard Methods 4500-P E 1999, 2011				05/05/2023 12:51
	SW-846 9036 (Total)				05/10/2023 16:33
	SW-846 9040B Field				05/03/2023 13:13
	SW-846 9214 (Total)				05/09/2023 12:13
	SW-846 9251 (Total)				05/10/2023 16:15
23041536-008B	JOP_G009	05/03/2023 13:13	05/04/2023 8:10		
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 16:45
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 16:45
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				05/05/2023 12:48
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 17:21
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 17:21
	Standard Methods 4500-P E (Dissolved) 1999, 2011				05/05/2023 12:00
	Standard Methods 4500-P E (Dissolved) 1999				05/04/2023 20:46
	SW-846 9036 (Dissolved)				05/08/2023 13:20
	SW-846 9251 (Dissolved)				05/08/2023 13:15
23041536-008C	JOP_G009	05/03/2023 13:13	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/06/2023 6:39
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/13/2023 14:41
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			05/04/2023 13:44	05/05/2023 13:58
	SW-846 7470A (Total)			05/05/2023 8:10	05/05/2023 12:42
23041536-008D	JOP_G009	05/03/2023 13:13	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/05/2023 10:28
23041536-008E	JOP_G009	05/03/2023 13:13	05/04/2023 8:10		
	SW-846 9060				05/09/2023 22:59



## Dates Report

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
23041536-008F	JOP_G009	05/03/2023 13:13	05/04/2023 8:10		
	SW-846 9060				05/09/2023 13:30
23041536-008G	JOP_G009	05/03/2023 13:13	05/04/2023 8:10		
	Ferrous Iron by CHEMets Kit				05/03/2023 13:13
23041536-009A	JOP_G010	05/03/2023 15:12	05/04/2023 8:10		
	Field Elevation Measurements				05/03/2023 15:12
	Standard Methods 2130 B Field				05/03/2023 15:12
	Standard Methods 18th Ed. 2580 B Field				05/03/2023 15:12
	Standard Methods 2320 B (Total) 1997, 2011				05/11/2023 9:14
	Standard Methods 2320 B 1997, 2011				05/11/2023 9:14
	Standard Methods 2510 B Field				05/03/2023 15:12
	Standard Methods 2540 C (Total) 1997, 2011				05/08/2023 11:13
	Standard Methods 2550 B Field				05/03/2023 15:12
	Standard Methods 4500-NO2 B (Total) 2000, 2011				05/05/2023 13:34
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:24
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:24
	Standard Methods 4500-O G Field				05/03/2023 15:12
	Standard Methods 4500-P E 1999				05/04/2023 20:46
	Standard Methods 4500-P E 1999, 2011				05/05/2023 12:51
	SW-846 9036 (Total)				05/10/2023 16:41
	SW-846 9040B Field				05/03/2023 15:12
	SW-846 9214 (Total)				05/09/2023 12:15
	SW-846 9251 (Total)				05/10/2023 16:36
23041536-009B	JOP_G010	05/03/2023 15:12	05/04/2023 8:10		
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 16:34
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 16:34
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				05/05/2023 13:34
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 15:24
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 15:24
	Standard Methods 4500-P E (Dissolved) 1999, 2011				05/05/2023 12:00
	Standard Methods 4500-P E (Dissolved) 1999				05/04/2023 20:46
	SW-846 9036 (Dissolved)				05/08/2023 13:44
	SW-846 9251 (Dissolved)				05/08/2023 13:39
23041536-009C	JOP_G010	05/03/2023 15:12	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/06/2023 6:43
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/13/2023 14:45
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			05/04/2023 13:44	05/05/2023 14:04





## Dates Report

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	SW-846 7470A (Total)			05/05/2023 8:10	05/05/2023 12:53
23041536-009D	JOP_G010	05/03/2023 15:12	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/05/2023 10:59
23041536-009E	JOP_G010	05/03/2023 15:12	05/04/2023 8:10		
	SW-846 9060				05/09/2023 23:05
23041536-009F	JOP_G010	05/03/2023 15:12	05/04/2023 8:10		
	SW-846 9060				05/09/2023 13:37
23041536-009G	JOP_G010	05/03/2023 15:12	05/04/2023 8:10		
	Ferrous Iron by CHEMets Kit				05/03/2023 15:12
23041536-010A	JOP_G011	05/03/2023 10:10	05/04/2023 8:10		
	Field Elevation Measurements				05/03/2023 10:10
	Standard Methods 2130 B Field				05/03/2023 10:10
	Standard Methods 18th Ed. 2580 B Field				05/03/2023 10:10
	Standard Methods 2320 B (Total) 1997, 2011				05/05/2023 15:40
	Standard Methods 2320 B 1997, 2011				05/05/2023 15:40
	Standard Methods 2510 B Field				05/03/2023 10:10
	Standard Methods 2540 C (Total) 1997, 2011				05/08/2023 11:14
	Standard Methods 2550 B Field				05/03/2023 10:10
	Standard Methods 4500-NO2 B (Total) 2000, 2011				05/04/2023 20:51
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/05/2023 0:00
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/05/2023 9:44
	Standard Methods 4500-O G Field				05/03/2023 10:10
	Standard Methods 4500-P E 1999				05/04/2023 15:58
	Standard Methods 4500-P E 1999, 2011				05/04/2023 18:44
	SW-846 9036 (Total)				05/10/2023 16:49
	SW-846 9040B Field				05/03/2023 10:10
	SW-846 9214 (Total)				05/09/2023 12:16
	SW-846 9251 (Total)				05/10/2023 16:44
23041536-010B	JOP_G011	05/03/2023 10:10	05/04/2023 8:10		
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 14:49
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 14:49
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				05/04/2023 20:55
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 21:05
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 21:05
	Standard Methods 4500-P E (Dissolved) 1999, 2011				05/04/2023 19:29
	Standard Methods 4500-P E (Dissolved) 1999				05/04/2023 15:58
	SW-846 9036 (Dissolved)				05/08/2023 13:53



## Dates Report

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name				Prep Date/Time	Analysis Date/Time
	SW-846 9251 (Dissolved)				05/08/2023 13:47
23041536-010C	JOP_G011	05/03/2023 10:10	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/06/2023 6:47
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/13/2023 14:48
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			05/04/2023 13:44	05/05/2023 14:10
	SW-846 7470A (Total)			05/05/2023 8:10	05/05/2023 12:56
23041536-010D	JOP_G011	05/03/2023 10:10	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/05/2023 11:00
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/05/2023 16:04
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/08/2023 17:45
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			05/04/2023 19:52	05/05/2023 10:40
23041536-010E	JOP_G011	05/03/2023 10:10	05/04/2023 8:10		
	SW-846 9060				05/09/2023 23:11
23041536-010F	JOP_G011	05/03/2023 10:10	05/04/2023 8:10		
	SW-846 9060				05/09/2023 13:43
23041536-010G	JOP_G011	05/03/2023 10:10	05/04/2023 8:10		
	Ferrous Iron by CHEMets Kit				05/03/2023 10:10
23041536-011A	JOP_G051&D	05/03/2023 9:28	05/04/2023 8:10		
	Field Elevation Measurements				05/03/2023 9:28
	Standard Methods 2130 B Field				05/03/2023 9:28
	Standard Methods 18th Ed. 2580 B Field				05/03/2023 9:28
	Standard Methods 2320 B (Total) 1997, 2011				05/04/2023 17:17
	Standard Methods 2320 B 1997, 2011				05/04/2023 17:17
	Standard Methods 2510 B Field				05/03/2023 9:28
	Standard Methods 2540 C (Total) 1997, 2011				05/08/2023 11:14
	Standard Methods 2550 B Field				05/03/2023 9:28
	Standard Methods 4500-NO2 B (Total) 2000, 2011				05/04/2023 20:53
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:41
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:41
	Standard Methods 4500-O G Field				05/03/2023 9:28
	Standard Methods 4500-P E 1999				05/04/2023 15:58
	Standard Methods 4500-P E 1999, 2011				05/04/2023 18:44
	SW-846 9036 (Total)				05/10/2023 16:55
	SW-846 9040B Field				05/03/2023 9:28
	SW-846 9214 (Total)				05/09/2023 12:18
	SW-846 9251 (Total)				05/10/2023 16:55
23041536-011B	JOP_G051&D	05/03/2023 9:28	05/04/2023 8:10		



## Dates Report

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 14:54
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 14:54
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				05/04/2023 20:56
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 17:25
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 17:25
	Standard Methods 4500-P E (Dissolved) 1999, 2011				05/04/2023 19:30
	Standard Methods 4500-P E (Dissolved) 1999				05/04/2023 15:58
	SW-846 9036 (Dissolved)				05/10/2023 11:27
	SW-846 9251 (Dissolved)				05/08/2023 15:42
23041536-011C	JOP_G051&D	05/03/2023 9:28	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/06/2023 6:50
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/13/2023 14:52
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			05/04/2023 13:44	05/05/2023 14:17
	SW-846 7470A (Total)			05/05/2023 8:10	05/05/2023 12:58
23041536-011D	JOP_G051&D	05/03/2023 9:28	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/05/2023 11:02
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			05/04/2023 19:52	05/05/2023 10:46
23041536-011E	JOP_G051&D	05/03/2023 9:28	05/04/2023 8:10		
	SW-846 9060				05/12/2023 11:48
23041536-011F	JOP_G051&D	05/03/2023 9:28	05/04/2023 8:10		
	SW-846 9060				05/12/2023 10:32
23041536-011G	JOP_G051&D	05/03/2023 9:28	05/04/2023 8:10		
	Ferrous Iron by CHEMets Kit				05/03/2023 9:28
23041536-012A	JOP_G052&D	05/03/2023 14:08	05/04/2023 8:10		
	Field Elevation Measurements				05/03/2023 14:08
	Standard Methods 2130 B Field				05/03/2023 14:08
	Standard Methods 18th Ed. 2580 B Field				05/03/2023 14:08
	Standard Methods 2320 B (Total) 1997, 2011				05/11/2023 9:19
	Standard Methods 2320 B 1997, 2011				05/11/2023 9:19
	Standard Methods 2510 B Field				05/03/2023 14:08
	Standard Methods 2540 C (Total) 1997, 2011				05/08/2023 11:14
	Standard Methods 2550 B Field				05/03/2023 14:08
	Standard Methods 4500-NO2 B (Total) 2000, 2011				05/05/2023 14:02
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/05/2023 9:48
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/05/2023 9:48
	Standard Methods 4500-O G Field				05/03/2023 14:08
	Standard Methods 4500-P E 1999				05/04/2023 20:46



## Dates Report

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	Standard Methods 4500-P E 1999, 2011				05/05/2023 13:31
	SW-846 9036 (Total)				05/10/2023 17:37
	SW-846 9040B Field				05/03/2023 14:08
	SW-846 9214 (Total)				05/09/2023 12:26
	SW-846 9251 (Total)				05/10/2023 17:32
23041536-012B	JOP_G052&D	05/03/2023 14:08	05/04/2023 8:10		
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/11/2023 9:23
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/11/2023 9:23
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				05/05/2023 13:32
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 21:08
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 21:08
	Standard Methods 4500-P E (Dissolved) 1999, 2011				05/05/2023 13:34
	Standard Methods 4500-P E (Dissolved) 1999				05/04/2023 20:46
	SW-846 9036 (Dissolved)				05/08/2023 13:59
	SW-846 9251 (Dissolved)				05/08/2023 13:55
23041536-012C	JOP_G052&D	05/03/2023 14:08	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/06/2023 7:13
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/13/2023 16:10
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/17/2023 10:29
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			05/04/2023 13:44	05/05/2023 14:23
	SW-846 7470A (Total)			05/05/2023 8:10	05/05/2023 13:00
23041536-012D	JOP_G052&D	05/03/2023 14:08	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/05/2023 11:03
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/05/2023 16:06
23041536-012E	JOP_G052&D	05/03/2023 14:08	05/04/2023 8:10		
	SW-846 9060				05/09/2023 23:24
23041536-012F	JOP_G052&D	05/03/2023 14:08	05/04/2023 8:10		
	SW-846 9060				05/12/2023 11:10
23041536-012G	JOP_G052&D	05/03/2023 14:08	05/04/2023 8:10		
	Ferrous Iron by CHEMets Kit				05/03/2023 14:08
23041536-013A	JOP_G053&D	05/03/2023 16:18	05/04/2023 8:10		
	Field Elevation Measurements				05/03/2023 16:18
	Standard Methods 2130 B Field				05/03/2023 16:18
	Standard Methods 18th Ed. 2580 B Field				05/03/2023 16:18
	Standard Methods 2320 B (Total) 1997, 2011				05/04/2023 17:22
	Standard Methods 2320 B 1997, 2011				05/04/2023 17:22
	Standard Methods 2510 B Field				05/03/2023 16:18



## Dates Report

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	Standard Methods 2540 C (Total) 1997, 2011				05/08/2023 11:14
	Standard Methods 2550 B Field				05/03/2023 16:18
	Standard Methods 4500-NO2 B (Total) 2000, 2011				05/05/2023 14:09
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/05/2023 10:36
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/05/2023 10:36
	Standard Methods 4500-O G Field				05/03/2023 16:18
	Standard Methods 4500-P E 1999				05/04/2023 20:46
	Standard Methods 4500-P E 1999, 2011				05/05/2023 13:32
	SW-846 9036 (Total)				05/10/2023 17:40
	SW-846 9040B Field				05/03/2023 16:18
	SW-846 9214 (Total)				05/09/2023 12:28
	SW-846 9251 (Total)				05/10/2023 17:40
23041536-013B	JOP_G053&D	05/03/2023 16:18	05/04/2023 8:10		
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 16:40
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 16:40
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				05/05/2023 14:08
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 15:40
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 15:40
	Standard Methods 4500-P E (Dissolved) 1999, 2011				05/05/2023 13:33
	Standard Methods 4500-P E (Dissolved) 1999				05/04/2023 20:46
	SW-846 9036 (Dissolved)				05/10/2023 11:51
	SW-846 9251 (Dissolved)				05/08/2023 14:06
23041536-013C	JOP_G053&D	05/03/2023 16:18	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/06/2023 7:16
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/13/2023 16:14
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/17/2023 10:29
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			05/04/2023 13:44	05/05/2023 14:29
	SW-846 7470A (Total)			05/05/2023 8:10	05/05/2023 13:03
23041536-013D	JOP_G053&D	05/03/2023 16:18	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/05/2023 11:05
23041536-013E	JOP_G053&D	05/03/2023 16:18	05/04/2023 8:10		
	SW-846 9060				05/10/2023 0:02
23041536-013F	JOP_G053&D	05/03/2023 16:18	05/04/2023 8:10		
	SW-846 9060				05/09/2023 16:26
23041536-013G	JOP_G053&D	05/03/2023 16:18	05/04/2023 8:10		
	Ferrous Iron by CHEMets Kit				05/03/2023 16:18
23041536-014A	JOP_G054&D	05/03/2023 12:18	05/04/2023 8:10		



## Dates Report

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	Field Elevation Measurements				05/03/2023 12:18
	Standard Methods 2130 B Field				05/03/2023 12:18
	Standard Methods 18th Ed. 2580 B Field				05/03/2023 12:18
	Standard Methods 2320 B (Total) 1997, 2011				05/04/2023 17:27
	Standard Methods 2320 B 1997, 2011				05/04/2023 17:27
	Standard Methods 2510 B Field				05/03/2023 12:18
	Standard Methods 2540 C (Total) 1997, 2011				05/08/2023 11:49
	Standard Methods 2550 B Field				05/03/2023 12:18
	Standard Methods 4500-NO2 B (Total) 2000, 2011				05/05/2023 12:00
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:55
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 16:55
	Standard Methods 4500-O G Field				05/03/2023 12:18
	Standard Methods 4500-P E 1999				05/04/2023 20:46
	Standard Methods 4500-P E 1999, 2011				05/05/2023 11:56
	SW-846 9036 (Total)				05/10/2023 17:53
	SW-846 9040B Field				05/03/2023 12:18
	SW-846 9214 (Total)				05/09/2023 12:30
	SW-846 9251 (Total)				05/10/2023 17:48
23041536-014B	JOP_G054&D	05/03/2023 12:18	05/04/2023 8:10		
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 15:16
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 15:16
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				05/05/2023 12:02
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 15:42
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 15:42
	Standard Methods 4500-P E (Dissolved) 1999, 2011				05/05/2023 11:57
	Standard Methods 4500-P E (Dissolved) 1999				05/04/2023 20:46
	SW-846 9036 (Dissolved)				05/08/2023 14:48
	SW-846 9251 (Dissolved)				05/08/2023 14:43
23041536-014C	JOP_G054&D	05/03/2023 12:18	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/06/2023 7:20
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/13/2023 15:18
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/17/2023 10:30
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			05/04/2023 13:44	05/05/2023 15:02
	SW-846 7470A (Total)			05/05/2023 8:10	05/05/2023 13:05
23041536-014D	JOP_G054&D	05/03/2023 12:18	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/05/2023 11:06
23041536-014E	JOP_G054&D	05/03/2023 12:18	05/04/2023 8:10		



## Dates Report

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name				Prep Date/Time	Analysis Date/Time
	SW-846 9060				05/10/2023 0:21
23041536-014F	JOP_G054&D	05/03/2023 12:18	05/04/2023 8:10		
	SW-846 9060				05/09/2023 16:32
23041536-014G	JOP_G054&D	05/03/2023 12:18	05/04/2023 8:10		
	Ferrous Iron by CHEMets Kit				05/03/2023 12:18
23041536-020A	Field Blank	05/03/2023 18:45	05/04/2023 8:10		
	Standard Methods 2320 B (Total) 1997, 2011				05/11/2023 10:01
	Standard Methods 2320 B 1997, 2011				05/11/2023 10:01
	Standard Methods 2540 C (Total) 1997, 2011				05/08/2023 11:50
	Standard Methods 4500-NO2 B (Total) 2000, 2011				05/05/2023 14:09
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 21:34
	Standard Methods 4500-NO3 F (Total) 2000, 2011				05/04/2023 21:34
	Standard Methods 4500-P E 1999				05/04/2023 20:46
	Standard Methods 4500-P E 1999, 2011				05/05/2023 13:33
	SW-846 9036 (Total)				05/10/2023 18:36
	SW-846 9214 (Total)				05/09/2023 12:52
	SW-846 9251 (Total)				05/10/2023 18:36
23041536-020B	Field Blank	05/03/2023 18:45	05/04/2023 8:10		
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 15:37
	Standard Methods 2320 B (Dissolved) 1997, 2011				05/05/2023 15:37
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				05/05/2023 12:07
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 21:27
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				05/04/2023 21:27
	Standard Methods 4500-P E (Dissolved) 1999, 2011				05/04/2023 19:33
	Standard Methods 4500-P E (Dissolved) 1999				05/04/2023 15:58
	SW-846 9036 (Dissolved)				05/08/2023 16:04
	SW-846 9251 (Dissolved)				05/08/2023 16:06
23041536-020C	Field Blank	05/03/2023 18:45	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/06/2023 7:35
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/13/2023 15:33
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/17/2023 10:52
	SW-846 3005A, 6010B, Metals by ICP (Total)			05/04/2023 13:44	05/17/2023 15:01
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			05/04/2023 13:44	05/05/2023 15:27
	SW-846 7470A (Total)			05/05/2023 8:10	05/05/2023 13:19
23041536-020D	Field Blank	05/03/2023 18:45	05/04/2023 8:10		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			05/04/2023 19:52	05/05/2023 11:29
23041536-020E	Field Blank	05/03/2023 18:45	05/04/2023 8:10		





## Dates Report

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	SW-846 9060				05/10/2023 0:46
23041536-020F	Field Blank	05/03/2023 18:45	05/04/2023 8:10		
	SW-846 9060				05/09/2023 16:58



## Quality Control Results

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

Client: Ramboll  
Client Project: JOP-23Q2

Work Order: 23041536  
Report Date: 19-Jun-23

### STANDARD METHODS 2510 B FIELD

Batch R328720		SampType: LCS		Units µS/cm						
SampID: LCS-R328720										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		1420	1409	0	100.7	90	110	05/03/2023
Spec. Conductance, Field	*	0		1400	1409	0	99.4	90	110	05/02/2023

### SW-846 9040B FIELD

Batch R328720		SampType: LCS		Units						
SampID: LCS-R328720										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		6.93	7.000	0	99.0	98.57	101.4	05/02/2023
pH	*	1.00		6.98	7.000	0	99.7	98.57	101.4	05/03/2023

### STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R328428		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	05/06/2023
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	05/06/2023

Batch R328428		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		930	1000	0	93.0	90	110	05/06/2023
Total Dissolved Solids		20		928	1000	0	92.8	90	110	05/06/2023

Batch R328528		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	05/08/2023
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	05/08/2023
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	05/08/2023
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	05/08/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

### STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R328528		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Dissolved Solids		20		942	1000	0	94.2	90	110	05/08/2023	
Total Dissolved Solids		20		938	1000	0	93.8	90	110	05/08/2023	
Total Dissolved Solids		20		948	1000	0	94.8	90	110	05/08/2023	
Total Dissolved Solids		20		928	1000	0	92.8	90	110	05/08/2023	

Batch R328528		SampType: DUP		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23041536-016ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Total Dissolved Solids		20		3980				3972	0.30	05/08/2023		

Batch R328566		SampType: MBLK		Units mg/L							Date Analyzed
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	05/09/2023	

Batch R328566		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Dissolved Solids		20		956	1000	0	95.6	90	110	05/09/2023	

Batch R328566		SampType: DUP		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23041536-007ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Total Dissolved Solids		20		724				714.0	1.39	05/09/2023		

Batch R329144		SampType: MBLK		Units mg/L							Date Analyzed
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	05/20/2023	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	05/19/2023	

Batch R329144		SampType: LCS		Units mg/L							Date Analyzed
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	05/19/2023	
Total Dissolved Solids		20		964	1000	0	96.4	90	110	05/20/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

### STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R329144		SampType: DUP		Units mg/L				RPD Limit: 10			
SampID: 23041536-008ADUP											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Total Dissolved Solids		20	H	550				534.0	2.95	05/19/2023	

### STANDARD METHODS 4500-NO2 B (DISSOLVED) 2000, 2011

Batch R328254		SampType: MS		Units mg/L				RPD Limit: 10			
SampID: 23041536-010BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		0.51	0.5000	0	101.6	85	115	05/04/2023	

Batch R328254		SampType: MSD		Units mg/L				RPD Limit: 10			
SampID: 23041536-010BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		0.51	0.5000	0	102.0	0.5080	0.39	05/04/2023	

Batch R328254		SampType: MS		Units mg/L				RPD Limit: 10			
SampID: 23041536-011BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		0.53	0.5000	0	105.8	85	115	05/04/2023	

Batch R328254		SampType: MSD		Units mg/L				RPD Limit: 10			
SampID: 23041536-011BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		0.53	0.5000	0	105.8	0.5290	0.00	05/04/2023	

Batch R328355		SampType: MS		Units mg/L				RPD Limit: 10			
SampID: 23041536-008BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		0.54	0.5000	0	108.2	85	115	05/05/2023	

Batch R328355		SampType: MSD		Units mg/L				RPD Limit: 10			
SampID: 23041536-008BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		0.54	0.5000	0	108.6	0.5410	0.37	05/05/2023	



## Quality Control Results

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

Client: Ramboll  
Client Project: JOP-23Q2

Work Order: 23041536  
Report Date: 19-Jun-23

### STANDARD METHODS 4500-NO2 B (TOTAL) 2000, 2011

Batch R328254		SampType: MBLK		Units mg/L							
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
SampID: MBLK											
Nitrogen, Nitrite (as N)			0.05		< 0.05	0.0250	0	0	-100	100	05/03/2023
Nitrogen, Nitrite (as N)			0.05		< 0.05	0.0250	0	0	-100	100	05/03/2023

Batch R328254		SampType: LCS		Units mg/L							
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
SampID: LCS											
Nitrogen, Nitrite (as N)			0.25		0.70	0.6510	0	106.8	90	110	05/03/2023
Nitrogen, Nitrite (as N)			0.25		0.70	0.6510	0	106.8	90	110	05/03/2023

Batch R328254		SampType: MS		Units mg/L							
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
SampID: 23041536-003AMS											
Nitrogen, Nitrite (as N)			0.05		0.52	0.5000	0	104.8	85	115	05/04/2023

Batch R328254		SampType: MSD		Units mg/L							
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
SampID: 23041536-003AMSD											
Nitrogen, Nitrite (as N)			0.05		0.53	0.5000	0	105.2	0.5240	0.38	05/04/2023

Batch R328254		SampType: MS		Units mg/L							
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
SampID: 23041536-010AMS											
Nitrogen, Nitrite (as N)			0.05		0.51	0.5000	0	102.0	85	115	05/04/2023

Batch R328254		SampType: MSD		Units mg/L							
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
SampID: 23041536-010AMSD											
Nitrogen, Nitrite (as N)			0.05		0.51	0.5000	0	102.8	0.5100	0.78	05/04/2023

Batch R328355		SampType: MBLK		Units mg/L							
Analyses		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
SampID: MBLK											
Nitrogen, Nitrite (as N)			0.05		< 0.05	0.0250	0	0	-100	100	05/05/2023
Nitrogen, Nitrite (as N)			0.05		< 0.05	0.0250	0	0	-100	100	05/05/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

### STANDARD METHODS 4500-NO2 B (TOTAL) 2000, 2011

Batch R328355		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.25		0.70	0.6510	0	106.8	90	110	05/05/2023	
Nitrogen, Nitrite (as N)		0.25		0.70	0.6510	0	106.8	90	110	05/05/2023	

Batch R328355		SampType: MS		Units mg/L							Date Analyzed
SampID: 23041536-008AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		0.54	0.5000	0	108.8	85	115	05/05/2023	

Batch R328355		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23041536-008AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Nitrogen, Nitrite (as N)		0.05		0.55	0.5000	0	109.6	0.5440	0.73	05/05/2023		

Batch R328355		SampType: MS		Units mg/L							Date Analyzed
SampID: 23041536-014AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		0.55	0.5000	0	110.2	85	115	05/05/2023	

Batch R328355		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23041536-014AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Nitrogen, Nitrite (as N)		0.05		0.55	0.5000	0	110.6	0.5510	0.36	05/05/2023		

### STANDARD METHODS 4500-NO3 F (DISSOLVED) 2000, 2011

Batch R328340		SampType: MS		Units mg/L							Date Analyzed
SampID: 23041536-003BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.250		3.64	1.250	2.334	104.1	85	115	05/04/2023	

Batch R328340		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23041536-003BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Nitrogen, Nitrate-Nitrite (as N)		0.250		3.59	1.250	2.334	100.6	3.635	1.19	05/04/2023		



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

### STANDARD METHODS 4500-NO3 F (DISSOLVED) 2000, 2011

Batch R328340		SampType: MS		Units mg/L							Date
SampID: 23041536-011BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.249</b>	0.2500	0.01300	94.4	85	115		05/04/2023

Batch R328340		SampType: MSD		Units mg/L		RPD Limit: 10					Date
SampID: 23041536-011BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.252</b>	0.2500	0.01300	95.6	0.2490	1.20		05/04/2023

### STANDARD METHODS 4500-NO3 F (TOTAL) 2000, 2011

Batch R328340		SampType: MBLK		Units mg/L							Date
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Nitrogen, Nitrate (as N)		0.050		< <b>0.050</b>							05/04/2023
Nitrogen, Nitrate-Nitrite (as N)		0.050		< <b>0.050</b>	0.0090	0	0	-100	100		05/04/2023

Batch R328340		SampType: LCS		Units mg/L							Date
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.506</b>	0.5000	0	101.2	90	110		05/04/2023

Batch R328340		SampType: MS		Units mg/L							Date
SampID: 23041536-004AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.638</b>	0.2500	0.3930	98.0	85	115		05/04/2023

Batch R328340		SampType: MSD		Units mg/L		RPD Limit: 10					Date
SampID: 23041536-004AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.642</b>	0.2500	0.3930	99.6	0.6380	0.63		05/04/2023

Batch R328402		SampType: MBLK		Units mg/L							Date
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Nitrogen, Nitrate (as N)		0.050		< <b>0.050</b>							05/05/2023
Nitrogen, Nitrate-Nitrite (as N)		0.050		< <b>0.050</b>	0.0090	0	0	-100	100		05/05/2023





## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

### STANDARD METHODS 4500-NO3 F (TOTAL) 2000, 2011

Batch R328402		SampType: LCS		Units mg/L							
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.502</b>	0.5000	0	100.4	90	110	05/05/2023	

Batch R328402		SampType: MS		Units mg/L							
SampID: 23041536-013AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.244</b>	0.2500	0	97.6	85	115	05/05/2023	

Batch R328402		SampType: MSD		Units mg/L						RPD Limit: 10		Date Analyzed
SampID: 23041536-013AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.248</b>	0.2500	0	99.2	0.2440	1.63	05/05/2023		

Batch R328974		SampType: MBLK		Units mg/L							
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>&lt; 0.050</b>	0.0090	0	0	-100	100	05/17/2023	

Batch R328974		SampType: LCS		Units mg/L							
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.547</b>	0.5000	0	109.4	90	110	05/17/2023	

### STANDARD METHODS 4500-P E (DISSOLVED) 1999, 2011

Batch R328769		SampType: MS		Units mg/L							
SampID: 23041536-002BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)	*	0.010	H	<b>0.045</b>	0.0500	0	90.0	85	115	05/12/2023	

Batch R328769		SampType: MSD		Units mg/L						RPD Limit: 10		Date Analyzed
SampID: 23041536-002BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Phosphorus, Orthophosphate (as P)	*	0.010	H	<b>0.044</b>	0.0500	0	88.0	0.04500	2.25	05/12/2023		



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

### STANDARD METHODS 4500-P E 1999, 2011

Batch R328325		SampType: MBLK		Units mg/L							
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)	*	0.010		< 0.010	0.0020	0	0	-100	100	05/04/2023	

Batch R328325		SampType: LCS		Units mg/L							
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)	*	0.010		0.090	0.1000	0	90.0	90	110	05/04/2023	

Batch R328408		SampType: MBLK		Units mg/L							
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)	*	0.010		< 0.010	0.0020	0	0	-100	100	05/04/2023	

Batch R328408		SampType: LCS		Units mg/L							
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)	*	0.010		0.099	0.1000	0	99.0	90	110	05/04/2023	

Batch R328408		SampType: MS		Units mg/L							
SampID: 23041536-002AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)	*	0.010		0.043	0.0500	0	86.0	85	115	05/04/2023	

Batch R328408		SampType: MSD		Units mg/L							
SampID: 23041536-002AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Phosphorus, Orthophosphate (as P)	*	0.010		0.043	0.0500	0	86.0	0.04300	0.00	05/04/2023	

Batch R328408		SampType: MS		Units mg/L							
SampID: 23041536-004AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)	*	0.050		0.240	0.2500	0	96.0	85	115	05/05/2023	

Batch R328408		SampType: MSD		Units mg/L							
SampID: 23041536-004AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Phosphorus, Orthophosphate (as P)	*	0.050		0.250	0.2500	0	100.0	0.2400	4.08	05/05/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

### STANDARD METHODS 4500-P E 1999, 2011

Batch R328769		SampType: MBLK		Units mg/L							
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)	*	0.010		< 0.010	0.0020	0	0	-100	100	05/12/2023	

Batch R328769		SampType: LCS		Units mg/L							
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)	*	0.010		0.094	0.1000	0	94.0	90	110	05/12/2023	

### SW-846 9036 (DISSOLVED)

Batch R328483		SampType: MS		Units mg/L							
SampID: 23041536-002BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		30	20.00	12.92	87.9	85	115	05/08/2023	

Batch R328483		SampType: MSD		Units mg/L							
SampID: 23041536-002BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		10		31	20.00	12.92	88.0	30.50	0.10	05/08/2023	

Batch R328607		SampType: MS		Units mg/L							
SampID: 23041536-013BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		20	E	103	40.00	67.84	88.7	85	115	05/10/2023	

Batch R328607		SampType: MSD		Units mg/L							
SampID: 23041536-013BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		20	E	105	40.00	67.84	93.2	103.3	1.74	05/10/2023	

Batch R328705		SampType: MBLK		Units mg/L							
SampID: MB-R328705											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		< 10	7.620	0	0	-100	100	05/11/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

### SW-846 9036 (DISSOLVED)

Batch R328705		SampType: LCS		Units mg/L						
SampID: LCS-R328705										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		19	20.00	0	95.2	90	110	05/11/2023

### SW-846 9036 (TOTAL)

Batch R328483		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	05/08/2023

Batch R328483		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	95.4	90	110	05/08/2023

Batch R328607		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	05/10/2023

Batch R328607		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		20	20.00	0	99.4	90	110	05/10/2023

Batch R328607		SampType: MS		Units mg/L						
SampID: 23041536-003AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		50		186	100.0	97.34	89.0	85	115	05/10/2023

Batch R328607		SampType: MSD		Units mg/L						
SampID: 23041536-003AMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		50	S	177	100.0	97.34	79.4	186.4	5.27	05/10/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

### SW-846 9036 (TOTAL)

Batch R328607		SampType: MS		Units mg/L							Date Analyzed
SampID: 23041536-011AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		20		97	40.00	59.46	93.5	85	115	05/10/2023	

Batch R328607		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23041536-011AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Sulfate		20		97	40.00	59.46	94.8	96.86	0.53	05/10/2023		

Batch R328705		SampType: MBLK		Units mg/L							Date Analyzed
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	05/11/2023	

Batch R328705		SampType: LCS		Units mg/L							Date Analyzed
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	95.2	90	110	05/11/2023	

### SW-846 9060

Batch R328511		SampType: MBLK		Units mg/L							Date Analyzed
SampID: Filter MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Dissolved Organic Carbon		1.0		< 1.0	0.4500	0	0	-100	100	05/09/2023	

Batch R328511		SampType: MBLK		Units mg/L							Date Analyzed
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Organic Carbon (TOC)		1.0		< 1.0	0.4500	0	0	-100	100	05/09/2023	

Batch R328511		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK/ICB											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Organic Carbon (TOC)		1.0		< 1.0	0.4500	0	0	-100	100	05/09/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

### SW-846 9060

Batch R328511		SampType: LCS		Units mg/L							Date
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Total Organic Carbon (TOC)		20.0		60.8	59.30	0	102.5	90	110		05/09/2023

Batch R328511		SampType: LCS		Units mg/L							Date
SampID: LCS/ICV											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Total Organic Carbon (TOC)		20.0		58.5	59.30	0	98.6	90	110		05/09/2023

Batch R328511		SampType: MS		Units mg/L							Date
SampID: 23041536-001EMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Total Organic Carbon (TOC)		1.0		5.4	5.000	1.010	88.6	85	115		05/09/2023

Batch R328511		SampType: MSD		Units mg/L		RPD Limit: 10					Date
SampID: 23041536-001EMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Total Organic Carbon (TOC)		1.0		5.4	5.000	1.010	87.8	5.440	0.74		05/09/2023

Batch R328511		SampType: MS		Units mg/L							Date
SampID: 23041536-001FMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Dissolved Organic Carbon		1.0		5.6	5.000	0.9500	93.4	85	115		05/09/2023

Batch R328511		SampType: MSD		Units mg/L		RPD Limit: 10					Date
SampID: 23041536-001FMDS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Dissolved Organic Carbon		1.0		5.6	5.000	0.9500	93.4	5.620	0.00		05/09/2023

Batch R328511		SampType: MS		Units mg/L							Date
SampID: 23041536-013EMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Total Organic Carbon (TOC)		1.0		6.0	5.000	1.290	95.2	85	115		05/10/2023

Batch R328511		SampType: MSD		Units mg/L		RPD Limit: 10					Date
SampID: 23041536-013EMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Total Organic Carbon (TOC)		1.0		6.1	5.000	1.290	96.0	6.050	0.66		05/10/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

### SW-846 9060

Batch R328749 SampType: MBLK Units mg/L

SampID: Filter MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Dissolved Organic Carbon		1.0		< 1.0	0.4500	0	0	-100	100	05/12/2023

Batch R328749 SampType: MBLK Units mg/L

SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Organic Carbon (TOC)		1.0		< 1.0	0.4500	0	0	-100	100	05/12/2023

Batch R328749 SampType: LCS Units mg/L

SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Organic Carbon (TOC)		20.0		61.0	59.30	0	102.8	90	110	05/12/2023

Batch R328749 SampType: MS Units mg/L

SampID: 23041536-012FMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Dissolved Organic Carbon		1.0		5.3	5.000	0.7000	91.2	85	115	05/12/2023

Batch R328749 SampType: MSD Units mg/L

SampID: 23041536-012FMDS

RPD Limit: 10

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Dissolved Organic Carbon		1.0		5.2	5.000	0.7000	90.6	5.260	0.57	05/12/2023

### SW-846 9214 (TOTAL)

Batch R328523 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	05/09/2023

Batch R328523 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		1.10	1.000	0	109.8	90	110	05/09/2023





## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

### SW-846 9214 (TOTAL)

Batch R328523		SampType: MS		Units mg/L							Date Analyzed
SampID: 23041536-007AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Fluoride		0.10		2.35	2.000	0.2850	103.3	75	125	05/09/2023	

Batch R328523		SampType: MSD		Units mg/L		RPD Limit: 15					Date Analyzed
SampID: 23041536-007AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Fluoride		0.10		2.37	2.000	0.2850	104.2	2.351	0.80	05/09/2023	

Batch R328523		SampType: MS		Units mg/L							Date Analyzed
SampID: 23041536-015AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Fluoride		0.10		2.43	2.000	0.3450	104.2	75	125	05/09/2023	

Batch R328523		SampType: MSD		Units mg/L		RPD Limit: 15					Date Analyzed
SampID: 23041536-015AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Fluoride		0.10		2.43	2.000	0.3450	104.0	2.428	0.12	05/09/2023	

Batch R328523		SampType: MS		Units mg/L							Date Analyzed
SampID: 23041536-016AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Fluoride		0.10		2.58	2.000	0.4810	105.2	75	125	05/09/2023	

Batch R328523		SampType: MSD		Units mg/L		RPD Limit: 15					Date Analyzed
SampID: 23041536-016AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Fluoride		0.10		2.61	2.000	0.4810	106.6	2.585	1.08	05/09/2023	

### SW-846 9251 (DISSOLVED)

Batch R328502		SampType: MS		Units mg/L							Date Analyzed
SampID: 23041536-002BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Chloride		4		40	20.00	21.54	90.8	85	115	05/08/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

### SW-846 9251 (DISSOLVED)

Batch R328502		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 23041536-002BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		39	20.00	21.54	89.0	39.69	0.86	05/08/2023	

Batch R328502		SampType: MS		Units mg/L							
SampID: 23041536-013BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		36	20.00	17.61	90.8	85	115	05/08/2023	

Batch R328502		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 23041536-013BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		36	20.00	17.61	90.6	35.77	0.08	05/08/2023	

### SW-846 9251 (TOTAL)

Batch R328502		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	05/08/2023	

Batch R328502		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	100.8	90	110	05/08/2023	

Batch R328580		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	05/10/2023	

Batch R328580		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	101.5	90	110	05/10/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

### SW-846 9251 (TOTAL)

Batch R328580		SampType: MS		Units mg/L							Date Analyzed
SampID: 23041536-003AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		8		<b>66</b>	40.00	27.76	96.0	85	115	05/10/2023	

Batch R328580		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23041536-003AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Chloride		8		<b>66</b>	40.00	27.76	96.8	66.17	0.44	05/10/2023		

Batch R328580		SampType: MS		Units mg/L							Date Analyzed
SampID: 23041536-011AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		8		<b>51</b>	40.00	11.29	98.9	85	115	05/10/2023	

Batch R328580		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23041536-011AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Chloride		8		<b>51</b>	40.00	11.29	98.8	50.86	0.06	05/10/2023		

Batch R328687		SampType: MBLK		Units mg/L							Date Analyzed
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		<b>&lt; 4</b>	0.5000	0	0	-100	100	05/11/2023	

Batch R328687		SampType: LCS		Units mg/L							Date Analyzed
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		<b>20</b>	20.00	0	102.4	90	110	05/11/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

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

Batch 205824 SampType: MBLK Units mg/L  
SampID: MBLK-205824

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		< 0.0250	0.0127	0	0	-100	100	05/05/2023
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	05/05/2023
Copper		0.0050		< 0.0050	0.0013	0	0	-100	100	05/05/2023
Iron		0.0400		< 0.0400	0.0200	0	0	-100	100	05/05/2023
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	05/05/2023
Manganese		0.0070		< 0.0070	0.0025	0	0	-100	100	05/05/2023
Nickel		0.0050		< 0.0050	0.0016	0	0	-100	100	05/05/2023
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	05/05/2023
Silicon	*	0.0500		< 0.0500	0.0122	0	0	-100	100	05/05/2023
Silver		0.0070		< 0.0070	0.0027	0	0	-100	100	05/05/2023
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	05/05/2023
Strontium		0.0100		< 0.0100	0.0013	0	0	-100	100	05/05/2023
Tin		0.0200		< 0.0200	0.0045	0	0	-100	100	05/05/2023
Vanadium		0.0100		< 0.0100	0.0009	0	0	-100	100	05/05/2023
Zinc		0.0100		< 0.0100	0.0050	0	0	-100	100	05/05/2023

Batch 205824 SampType: LCS Units mg/L  
SampID: LCS-205824

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		1.74	2.000	0	87.2	85	115	05/05/2023
Calcium		0.100		2.36	2.500	0	94.5	85	115	05/05/2023
Copper		0.0050		0.228	0.2500	0	91.1	85	115	05/05/2023
Iron		0.0400		1.78	2.000	0	88.8	85	115	05/05/2023
Magnesium		0.0500		2.28	2.500	0	91.3	85	115	05/05/2023
Manganese		0.0070		0.450	0.5000	0	90.0	85	115	05/05/2023
Nickel		0.0050		0.442	0.5000	0	88.4	85	115	05/05/2023
Potassium		0.100		2.48	2.500	0	99.0	85	115	05/05/2023
Silicon	*	0.0500		0.442	0.5000	0	88.5	85	115	05/05/2023
Silver		0.0070		0.0451	0.0500	0	90.2	85	115	05/05/2023
Sodium		0.0500		2.32	2.500	0	92.7	85	115	05/05/2023
Strontium		0.0100		0.0935	0.1000	0	93.5	85	115	05/05/2023
Tin		0.0200		0.440	0.5000	0	87.9	85	115	05/05/2023
Vanadium		0.0100		0.442	0.5000	0	88.5	85	115	05/05/2023
Zinc		0.0100		0.438	0.5000	0	87.5	85	115	05/05/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

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

Batch 205824		SampType: MS		Units mg/L							Date Analyzed
SampID: 23041536-005DMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Aluminum		0.0250		1.77	2.000	0	88.3	75	125	05/05/2023	
Calcium		0.100	S	81.8	2.500	80.85	37.6	75	125	05/05/2023	
Iron		0.0400		1.77	2.000	0	88.5	75	125	05/05/2023	
Magnesium		0.0500	S	22.9	2.500	21.13	72.2	75	125	05/05/2023	
Manganese		0.0070		0.496	0.5000	0.01550	96.0	75	125	05/05/2023	
Potassium		0.100		4.50	2.500	2.086	96.6	75	125	05/05/2023	
Silicon	*	0.0500	S	6.84	0.5000	6.480	72.6	75	125	05/05/2023	
Sodium		0.0500	S	43.3	2.500	42.20	42.8	75	125	05/05/2023	

Batch 205824		SampType: MSD		Units mg/L							RPD Limit: 20	Date Analyzed
SampID: 23041536-005DMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Aluminum		0.0250		1.75	2.000	0	87.3	1.766	1.12	05/05/2023		
Calcium		0.100	S	80.7	2.500	80.85	-6.4	81.79	1.35	05/05/2023		
Iron		0.0400		1.76	2.000	0	87.9	1.770	0.67	05/05/2023		
Magnesium		0.0500	S	22.7	2.500	21.13	62.1	22.94	1.11	05/05/2023		
Manganese		0.0070		0.466	0.5000	0.01550	90.0	0.4957	6.24	05/05/2023		
Potassium		0.100		4.46	2.500	2.086	94.9	4.501	0.98	05/05/2023		
Silicon	*	0.0500	S	6.76	0.5000	6.480	56.1	6.843	1.21	05/05/2023		
Sodium		0.0500	S	42.8	2.500	42.20	23.2	43.27	1.14	05/05/2023		



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

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

Batch 205805 SampType: MBLK Units mg/L

SampID: MBLK-205805

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		< 0.0250	0.0127	0	0	-100	100	05/17/2023
Aluminum		0.0250		< 0.0250	0.0127	0	0	-100	100	05/06/2023
Antimony		0.0500		< 0.0500	0.0068	0	0	-100	100	05/06/2023
Antimony		0.0500		< 0.0500	0.0068	0	0	-100	100	05/17/2023
Arsenic		0.0250		< 0.0250	0.0087	0	0	-100	100	05/17/2023
Arsenic		0.0250		< 0.0250	0.0087	0	0	-100	100	05/06/2023
Barium		0.0025		< 0.0025	0.0007	0	0	-100	100	05/17/2023
Barium		0.0025		< 0.0025	0.0007	0	0	-100	100	05/06/2023
Beryllium		0.0005		< 0.0005	0.0002	0	0	-100	100	05/06/2023
Beryllium		0.0005		< 0.0005	0.0002	0	0	-100	100	05/18/2023
Boron		0.0200		< 0.0200	0.0090	0	0	-100	100	05/17/2023
Boron		0.0200		< 0.0200	0.0090	0	0	-100	100	05/06/2023
Cadmium		0.0020		< 0.0020	0.0005	0	0	-100	100	05/17/2023
Cadmium		0.0020		< 0.0020	0.0005	0	0	-100	100	05/06/2023
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	05/06/2023
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	05/17/2023
Chromium		0.0050		< 0.0050	0.0028	0	0	-100	100	05/06/2023
Chromium		0.0050		< 0.0050	0.0028	0	0	-100	100	05/17/2023
Cobalt		0.0050		< 0.0050	0.0020	0	0	-100	100	05/06/2023
Copper		0.0050		< 0.0050	0.0013	0	0	-100	100	05/06/2023
Copper		0.0050		< 0.0050	0.0013	0	0	-100	100	05/17/2023
Iron		0.0400		< 0.0400	0.0200	0	0	-100	100	05/06/2023
Iron		0.0400		< 0.0400	0.0200	0	0	-100	100	05/17/2023
Lead		0.0150		< 0.0150	0.0014	0	0	-100	100	05/17/2023
Lead		0.0150		< 0.0150	0.0014	0	0	-100	100	05/06/2023
Lithium		0.0050		< 0.0050	0.0019	0	0	-100	100	05/06/2023
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	05/17/2023
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	05/06/2023
Manganese		0.0070		< 0.0070	0.0025	0	0	-100	100	05/06/2023
Manganese		0.0070		< 0.0070	0.0025	0	0	-100	100	05/17/2023
Molybdenum		0.0100		< 0.0100	0.0037	0	0	-100	100	05/17/2023
Molybdenum		0.0100		< 0.0100	0.0037	0	0	-100	100	05/06/2023
Nickel		0.0050		< 0.0050	0.0016	0	0	-100	100	05/17/2023
Nickel		0.0050		< 0.0050	0.0016	0	0	-100	100	05/06/2023
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	05/17/2023
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	05/06/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

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

Batch 205805 SampType: MBLK Units mg/L

SampID: MBLK-205805

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Selenium		0.0400		< 0.0400	0.0170	0	0	-100	100	05/06/2023
Selenium		0.0400		< 0.0400	0.0170	0	0	-100	100	05/17/2023
Silicon	*	0.0500		< 0.0500	0.0122	0	0	-100	100	05/06/2023
Silver		0.0070	J	0.0016	0.0027	0	59.3	-100	100	05/17/2023
Silver		0.0070		< 0.0070	0.0027	0	0	-100	100	05/06/2023
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	05/17/2023
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	05/06/2023
Strontium		0.0100		< 0.0100	0.0013	0	0	-100	100	05/17/2023
Strontium		0.0100		< 0.0100	0.0013	0	0	-100	100	05/06/2023
Sulfur	*	0.150		< 0.150	0.0230	0	0	-100	100	05/17/2023
Thallium		0.0500		< 0.0500	0.0111	0	0	-100	100	05/06/2023
Thallium		0.0500		< 0.0500	0.0111	0	0	-100	100	05/17/2023
Tin		0.0200		< 0.0200	0.0045	0	0	-100	100	05/06/2023
Tin		0.0200		< 0.0200	0.0045	0	0	-100	100	05/17/2023
Vanadium		0.0100		< 0.0100	0.0009	0	0	-100	100	05/17/2023
Vanadium		0.0100		< 0.0100	0.0009	0	0	-100	100	05/06/2023
Zinc		0.0100		< 0.0100	0.0050	0	0	-100	100	05/06/2023
Zinc		0.0100		< 0.0100	0.0050	0	0	-100	100	05/17/2023





## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

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

Batch	205805	SampType:	LCS	Units	mg/L						Date
SampID:	LCS-205805										Analyzed
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Aluminum		0.0250		<b>1.84</b>	2.000	0	92.1	85	115	05/17/2023	
Aluminum		0.0250		<b>1.86</b>	2.000	0	93.0	85	115	05/17/2023	
Aluminum		0.0250		<b>2.00</b>	2.000	0	100.0	85	115	05/06/2023	
Antimony		0.0500		<b>0.492</b>	0.5000	0	98.3	85	115	05/17/2023	
Antimony		0.0500		<b>0.485</b>	0.5000	0	97.0	85	115	05/17/2023	
Antimony		0.0500		<b>0.494</b>	0.5000	0	98.8	85	115	05/06/2023	
Arsenic		0.0250		<b>0.514</b>	0.5000	0	102.8	85	115	05/17/2023	
Arsenic		0.0250		<b>0.510</b>	0.5000	0	102.0	85	115	05/06/2023	
Arsenic		0.0250		<b>0.509</b>	0.5000	0	101.9	85	115	05/17/2023	
Barium		0.0025		<b>2.06</b>	2.000	0	103.0	85	115	05/17/2023	
Barium		0.0025		<b>2.07</b>	2.000	0	103.5	85	115	05/17/2023	
Barium		0.0025		<b>2.14</b>	2.000	0	107.2	85	115	05/06/2023	
Beryllium		0.0005		<b>0.0502</b>	0.0500	0	100.4	85	115	05/17/2023	
Beryllium		0.0005		<b>0.0519</b>	0.0500	0	103.8	85	115	05/06/2023	
Boron		0.0200		<b>0.491</b>	0.5000	0	98.3	85	115	05/17/2023	
Boron		0.0200		<b>0.484</b>	0.5000	0	96.8	85	115	05/17/2023	
Boron		0.0200		<b>0.517</b>	0.5000	0	103.4	85	115	05/06/2023	
Cadmium		0.0020		<b>0.0497</b>	0.0500	0	99.4	85	115	05/06/2023	
Cadmium		0.0020		<b>0.0540</b>	0.0500	0	108.0	85	115	05/17/2023	
Cadmium		0.0020		<b>0.0534</b>	0.0500	0	106.8	85	115	05/17/2023	
Calcium		0.100		<b>2.56</b>	2.500	0	102.4	85	115	05/17/2023	
Calcium		0.100		<b>2.65</b>	2.500	0	105.8	85	115	05/06/2023	
Calcium		0.100		<b>2.52</b>	2.500	0	100.8	85	115	05/17/2023	
Chromium		0.0050		<b>0.197</b>	0.2000	0	98.6	85	115	05/17/2023	
Chromium		0.0050		<b>0.200</b>	0.2000	0	99.8	85	115	05/17/2023	
Chromium		0.0050		<b>0.203</b>	0.2000	0	101.6	85	115	05/06/2023	
Cobalt		0.0050		<b>0.514</b>	0.5000	0	102.7	85	115	05/06/2023	
Cobalt		0.0050	B	<b>0.488</b>	0.5000	0	97.7	85	115	05/17/2023	
Cobalt		0.0050		<b>0.495</b>	0.5000	0	99.0	85	115	05/17/2023	
Copper		0.0050	B	<b>0.239</b>	0.2500	0	95.6	85	115	05/17/2023	
Copper		0.0050		<b>0.260</b>	0.2500	0	103.8	85	115	05/06/2023	
Copper		0.0050		<b>0.242</b>	0.2500	0	96.9	85	115	05/17/2023	
Iron		0.0400		<b>2.06</b>	2.000	0	103.0	85	115	05/17/2023	
Iron		0.0400		<b>2.03</b>	2.000	0	101.5	85	115	05/17/2023	
Iron		0.0400		<b>2.06</b>	2.000	0	103.2	85	115	05/06/2023	
Lead		0.0150		<b>0.500</b>	0.5000	0	100.1	85	115	05/17/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

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

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Lead		0.0150		<b>0.510</b>	0.5000	0	101.9	85	115	05/06/2023
Lead		0.0150		<b>0.494</b>	0.5000	0	98.8	85	115	05/17/2023
Lithium		0.0050		<b>0.529</b>	0.5000	0	105.8	85	115	05/06/2023
Lithium		0.0050		<b>0.440</b>	0.5000	0	88.0	85	115	05/17/2023
Magnesium		0.0500		<b>2.36</b>	2.500	0	94.2	85	115	05/17/2023
Magnesium		0.0500		<b>2.55</b>	2.500	0	101.9	85	115	05/06/2023
Magnesium		0.0500		<b>2.33</b>	2.500	0	93.2	85	115	05/17/2023
Manganese		0.0070		<b>0.497</b>	0.5000	0	99.5	85	115	05/17/2023
Manganese		0.0070		<b>0.516</b>	0.5000	0	103.3	85	115	05/06/2023
Manganese		0.0070		<b>0.487</b>	0.5000	0	97.3	85	115	05/17/2023
Molybdenum		0.0100		<b>0.474</b>	0.5000	0	94.8	85	115	05/17/2023
Molybdenum		0.0100		<b>0.480</b>	0.5000	0	95.9	85	115	05/17/2023
Molybdenum		0.0100		<b>0.498</b>	0.5000	0	99.5	85	115	05/06/2023
Nickel		0.0050		<b>0.495</b>	0.5000	0	99.0	85	115	05/17/2023
Nickel		0.0050		<b>0.505</b>	0.5000	0	101.0	85	115	05/06/2023
Nickel		0.0050		<b>0.501</b>	0.5000	0	100.3	85	115	05/17/2023
Potassium		0.100		<b>2.60</b>	2.500	0	104.0	85	115	05/17/2023
Potassium		0.100		<b>2.61</b>	2.500	0	104.6	85	115	05/17/2023
Potassium		0.100		<b>2.54</b>	2.500	0	101.4	85	115	05/06/2023
Selenium		0.0400		<b>0.507</b>	0.5000	0	101.4	85	115	05/17/2023
Selenium		0.0400		<b>0.486</b>	0.5000	0	97.2	85	115	05/06/2023
Selenium		0.0400		<b>0.503</b>	0.5000	0	100.5	85	115	05/17/2023
Silicon	*	0.0500		<b>0.532</b>	0.5000	0	106.4	85	115	05/17/2023
Silicon	*	0.0500		<b>0.465</b>	0.5000	0	93.1	85	115	05/06/2023
Silver		0.0070	B	<b>0.0490</b>	0.0500	0	98.0	85	115	05/17/2023
Silver		0.0070		<b>0.0486</b>	0.0500	0	97.2	85	115	05/17/2023
Silver		0.0070		<b>0.0514</b>	0.0500	0	102.8	85	115	05/06/2023
Sodium		0.0500		<b>2.32</b>	2.500	0	92.8	85	115	05/06/2023
Sodium		0.0500		<b>2.37</b>	2.500	0	94.8	85	115	05/17/2023
Sodium		0.0500		<b>2.35</b>	2.500	0	93.8	85	115	05/17/2023
Strontium		0.0100		<b>0.106</b>	0.1000	0	105.5	85	115	05/06/2023
Strontium		0.0100		<b>0.0977</b>	0.1000	0	97.7	85	115	05/17/2023
Strontium		0.0100		<b>0.0967</b>	0.1000	0	96.7	85	115	05/17/2023
Sulfur	*	0.150		<b>0.984</b>	1.000	0	98.4	85	115	05/17/2023
Sulfur	*	0.150		<b>0.990</b>	1.000	0	99.0	85	115	05/17/2023
Thallium		0.0500		<b>0.241</b>	0.2500	0	96.6	85	115	05/17/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

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

Batch 205805 SampType: LCS Units mg/L

SampID: LCS-205805

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Thallium		0.0500		<b>0.231</b>	0.2500	0	92.5	85	115	05/06/2023
Thallium		0.0500		<b>0.232</b>	0.2500	0	92.8	85	115	05/17/2023
Tin		0.0200		<b>0.491</b>	0.5000	0	98.2	85	115	05/17/2023
Tin		0.0200		<b>0.501</b>	0.5000	0	100.2	85	115	05/06/2023
Tin		0.0200		<b>0.485</b>	0.5000	0	97.1	85	115	05/17/2023
Vanadium		0.0100		<b>0.516</b>	0.5000	0	103.1	85	115	05/06/2023
Vanadium		0.0100		<b>0.491</b>	0.5000	0	98.1	85	115	05/17/2023
Vanadium		0.0100		<b>0.487</b>	0.5000	0	97.3	85	115	05/17/2023
Zinc		0.0100		<b>0.491</b>	0.5000	0	98.2	85	115	05/06/2023
Zinc		0.0100		<b>0.500</b>	0.5000	0	100.0	85	115	05/17/2023
Zinc		0.0100		<b>0.494</b>	0.5000	0	98.8	85	115	05/17/2023

Batch 205805 SampType: MS Units mg/L

SampID: 23041536-005CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250	S	<b>7.02</b>	2.000	3.311	185.4	75	125	05/06/2023
Arsenic		0.0250		<b>0.512</b>	0.5000	0	102.4	75	125	05/06/2023
Barium		0.0025		<b>2.17</b>	2.000	0.04540	106.1	75	125	05/06/2023
Beryllium		0.0005		<b>0.0519</b>	0.0500	0.0003000	103.2	75	125	05/06/2023
Boron		0.0200		<b>3.71</b>	0.5000	3.285	84.6	75	125	05/06/2023
Cadmium		0.0020		<b>0.0489</b>	0.0500	0	97.8	75	125	05/06/2023
Calcium		0.100	S	<b>92.8</b>	2.500	92.46	13.6	75	125	05/06/2023
Chromium		0.0050		<b>0.208</b>	0.2000	0.008400	100.0	75	125	05/06/2023
Iron		0.0400	S	<b>9.97</b>	2.000	7.341	131.4	75	125	05/06/2023
Lead		0.0150		<b>0.501</b>	0.5000	0	100.2	75	125	05/06/2023
Lithium		0.0250		<b>0.558</b>	0.5000	0	111.5	75	125	05/15/2023
Magnesium		0.0500	S	<b>26.1</b>	2.500	24.43	65.6	75	125	05/06/2023
Manganese		0.0070		<b>0.616</b>	0.5000	0.1024	102.7	75	125	05/06/2023
Molybdenum		0.0100		<b>0.493</b>	0.5000	0	98.5	75	125	05/06/2023
Potassium		0.100		<b>5.05</b>	2.500	2.486	102.7	75	125	05/06/2023
Silicon	*	0.0500	S	<b>16.1</b>	0.5000	13.18	576.0	75	125	05/06/2023
Sodium		0.0500	S	<b>50.8</b>	2.500	49.68	45.2	75	125	05/06/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

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

Batch	205805	SampType:	MSD	Units mg/L				RPD Limit: 20			
SampID: 23041536-005CMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Aluminum		0.0250	S	7.09	2.000	3.311	188.8	7.019	0.95	05/06/2023	
Arsenic		0.0250		0.517	0.5000	0	103.4	0.5121	0.91	05/06/2023	
Barium		0.0025		2.19	2.000	0.04540	107.4	2.168	1.15	05/06/2023	
Beryllium		0.0005		0.0526	0.0500	0.0003000	104.6	0.05190	1.34	05/06/2023	
Boron		0.0200		3.78	0.5000	3.285	99.0	3.708	1.92	05/06/2023	
Cadmium		0.0020		0.0493	0.0500	0	98.6	0.04890	0.81	05/06/2023	
Calcium		0.100		94.4	2.500	92.46	76.8	92.80	1.69	05/06/2023	
Chromium		0.0050		0.211	0.2000	0.008400	101.4	0.2084	1.33	05/06/2023	
Iron		0.0400	S	10.2	2.000	7.341	145.0	9.970	2.67	05/06/2023	
Lead		0.0150		0.507	0.5000	0	101.4	0.5011	1.15	05/06/2023	
Lithium		0.0250		0.551	0.5000	0	110.2	0.5575	1.17	05/15/2023	
Magnesium		0.0500		26.5	2.500	24.43	83.6	26.07	1.71	05/06/2023	
Manganese		0.0070		0.622	0.5000	0.1024	104.0	0.6157	1.05	05/06/2023	
Molybdenum		0.0100		0.496	0.5000	0	99.3	0.4926	0.77	05/06/2023	
Potassium		0.100		5.10	2.500	2.486	104.7	5.053	1.00	05/06/2023	
Silicon	*	0.0500	S	16.3	0.5000	13.18	616.0	16.06	1.24	05/06/2023	
Sodium		0.0500		51.7	2.500	49.68	80.4	50.81	1.72	05/06/2023	

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

Batch	205824	SampType:	MBLK	Units mg/L						
SampID: MBLK-205824										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Vanadium		0.0050		< 0.0050	0.0028	0	0	-100	100	05/05/2023

Batch	205824	SampType:	LCS	Units mg/L						
SampID: LCS-205824										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Vanadium		0.0050		0.469	0.5000	0	93.8	80	120	05/05/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

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

Batch 205805		SampType: MBLK		Units mg/L							
SampID: MBLK-205805											
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	05/05/2023	
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	05/05/2023	
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	05/05/2023	
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	05/05/2023	
Vanadium		0.0050		< 0.0050	0.0028	0	0	-100	100	05/05/2023	

Batch 205805		SampType: LCS		Units mg/L							
SampID: LCS-205805											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		0.520	0.5000	0	103.9	80	120	05/05/2023	
Cobalt		0.0010		0.510	0.5000	0	102.1	80	120	05/05/2023	
Selenium		0.0010		0.519	0.5000	0	103.8	80	120	05/05/2023	
Thallium		0.0020		0.246	0.2500	0	98.4	80	120	05/05/2023	
Vanadium		0.0050		0.504	0.5000	0	100.8	80	120	05/05/2023	

Batch 205805		SampType: MS		Units mg/L							
SampID: 23041536-005CMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		0.508	0.5000	0.001477	101.2	75	125	05/05/2023	
Cobalt		0.0010		0.479	0.5000	0.004035	95.0	75	125	05/05/2023	
Selenium		0.0010		0.507	0.5000	0	101.3	75	125	05/05/2023	
Thallium		0.0020		0.246	0.2500	0	98.4	75	125	05/05/2023	

Batch 205805		SampType: MSD		Units mg/L						RPD Limit: 20		Date Analyzed
SampID: 23041536-005CMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Antimony		0.0010		0.497	0.5000	0.001477	99.2	0.5076	2.00	05/05/2023		
Cobalt		0.0010		0.477	0.5000	0.004035	94.5	0.4790	0.50	05/05/2023		
Selenium		0.0010		0.488	0.5000	0	97.6	0.5065	3.75	05/05/2023		
Thallium		0.0020		0.246	0.2500	0	98.3	0.2460	0.15	05/05/2023		

### SW-846 7470A (TOTAL)

Batch 205809		SampType: MBLK		Units mg/L							
SampID: MBLK-205809											
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	05/05/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

### SW-846 7470A (TOTAL)

Batch 205809		SampType: LCS		Units mg/L						
SampID: LCS-205809										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		<b>0.00524</b>	0.0050	0	104.8	85	115	05/05/2023

Batch 205809		SampType: MS		Units mg/L						
SampID: 23041536-008CMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		<b>0.00474</b>	0.0050	0	94.7	75	125	05/05/2023

Batch 205809		SampType: MSD		Units mg/L							RPD Limit: 15
SampID: 23041536-008CMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		<b>0.00485</b>	0.0050	0	97.0	0.004736	2.34	05/05/2023	

Batch 205809		SampType: MS		Units mg/L						
SampID: 23041536-020CMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		<b>0.00506</b>	0.0050	0	101.1	75	125	05/05/2023

Batch 205809		SampType: MSD		Units mg/L							RPD Limit: 15
SampID: 23041536-020CMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		<b>0.00488</b>	0.0050	0	97.7	0.005057	3.50	05/05/2023	



## Receiving Check List

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

Client: Ramboll

Work Order: 23041536

Client Project: JOP-23Q2

Report Date: 19-Jun-23

Carrier: Joe Riley

Received By: ANC

Completed by:

*Allison Colin*

Reviewed by:

*Elizabeth A. Hurley*

On:

On:

04-May-23

04-May-23

Allison Colin

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Temp °C <b>4.2</b>
Type of thermal preservation?	None <input type="checkbox"/>	Ice <input checked="" type="checkbox"/>	Blue Ice <input type="checkbox"/>	Dry Ice <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Reported field parameters measured:	Field <input checked="" type="checkbox"/>	Lab <input type="checkbox"/>	NA <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		

*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 <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials <input checked="" type="checkbox"/>
Water - TOX containers have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No TOX containers <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
NPDES/CWA TCN interferences checked/treated in the field?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

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

pH strip #88374 - CET/acolin - 5/4/2023 1:25:58 PM

Additional HNO3 (89071) was needed in JOP\_G051&D (dissolved) upon arrival at the laboratory. - CET/acolin - 5/4/2023 1:26:28 PM

JOP\_G001&D was received with insufficient amount of time to meet hold time requirements for Nitrate and Phosphate analyses. Client was notified via work order summary. - ehurley - 5/4/2023 2:14:38 PM



CHAIN-OF-CUSTODY / Analytical Request Document

JOP-257-401

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, REGULATORY AGENCY, and Site Location details.

Main table with columns for Item #, Section D Required Client Information, Valid Matrix Codes, Collected (DATE, TIME), Preservatives, Analysis Test (JOP-257-401, etc.), Residual Chlorine, and Project No./ Lab I.D.

Handwritten note: Phw 88374. 2222 HNO3 8907 to dissolved from 60513 D. 675 5-4-23.

Bottom section including ADDITIONAL COMMENTS (JOP-23Q2-Rev 0-Part A-Lab), SAMPLED BY / AFFILIATION, ACCEPTED BY / AFFILIATION, and SAMPLED NAME AND SIGNATURE with a signature.

Handwritten initials and date: (K-5 5-4-23)

# CHAIN-OF-CUSTODY / Analytical Request Document

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

23041536  
JOP-257-401

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: <b>Vistra Corp</b>		Report To: <b>Brian Voelker</b>		Attention: <b>Jason Stuckey</b>	
Address: <b>13498 E. 900th St</b>		Copy To: <b>Jason Stuckey</b>		Company Name: <b>Vistra Corp</b>	
Email To: <b>Brian.Voelker@VistraCorp.com</b>		Purchase Order No.:		Address: <b>see Section A</b>	
Phone: <b>(217) 753-8911</b> Fax:		Project Name:		Quote Reference:	
Requested Due Date/TAT: <b>10 day</b>		Project Number: <b>2285</b>		Project Manager:	
				Profile #:	

REGULATORY AGENCY		
NPDES	GROUND WATER	DRINKING WATER
UST	RCRA	OTHER
Site Location	IL	
STATE:		

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	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 <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other		Y/N	Y/N	Y/N		
1	05/03/23 JOP_XPW03_pore		05/03/23 1139																23041536-017		
2	JOP_XSG01		05/03/23 1351																018		
3	JOP_YSG02		05/03/23 MA																019		
4	05/03/23 FIELD BLANK		05/03/23 1845																020		
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					
16																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
JOP-23Q2-Rev 0-Part A-Lab	[Signature] Teklab	05/04/23	0815	Alum Cole	5/4/23	0820	

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:	[Signature]				
SIGNATURE of SAMPLER:	[Signature]	DATE Signed (MM/DD/YY):	05/04/23		

June 23, 2023

Eric Bauer  
Ramboll  
300 S. Wacker Drive  
Suite 130  
Chicago, IL 60606  
TEL: (414) 837-3607  
FAX: (414) 837-3608



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

**RE: JOP-23Q2**

**WorkOrder: 23041537**

Dear Eric Bauer:

TEKLAB, INC received 15 samples on 5/4/2023 8:10:00 AM 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](mailto:ehurley@teklabinc.com)



## Report Contents

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

**Client:** Ramboll

**Work Order:** 23041537

**Client Project:** JOP-23Q2

**Report Date:** 23-Jun-23

**This reporting package includes the following:**

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Sample Summary	22
Dates Report	23
Receiving Check List	24
Chain of Custody	Appended



## Definitions

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

**Client:** Ramboll

**Work Order:** 23041537

**Client Project:** JOP-23Q2

**Report Date:** 23-Jun-23

### 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:** 23041537

**Client Project:** JOP-23Q2

**Report Date:** 23-Jun-23

### Qualifiers

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



## Case Narrative

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

**Client:** Ramboll  
**Client Project:** JOP-23Q2

**Work Order:** 23041537  
**Report Date:** 23-Jun-23

**Cooler Receipt Temp:** 4.2 °C

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

Analyses were performed by Pace Analytical National. 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  
**Client Project:** JOP-23Q2

**Work Order:** 23041537  
**Report Date:** 23-Jun-23

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2024	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2024	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2023	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2023	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2023	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		1/31/2024	Collinsville
Missouri	MDNR	00930		5/31/2023	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041537-001  
**Matrix:** GROUNDWATER

**Work Order:** 23041537  
**Report Date:** 23-Jun-23  
**Client Sample ID:** JOP\_G001&D  
**Collection Date:** 05/02/2023 9:26

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	06/14/2023 17:51	R330687



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041537-002  
**Matrix:** GROUNDWATER

**Work Order:** 23041537  
**Report Date:** 23-Jun-23  
**Client Sample ID:** JOP\_G002&D  
**Collection Date:** 05/03/2023 8:49

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	06/14/2023 17:51	R330687



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041537-003  
**Matrix:** GROUNDWATER

**Work Order:** 23041537  
**Report Date:** 23-Jun-23  
**Client Sample ID:** JOP\_G003  
**Collection Date:** 05/03/2023 8:08

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	06/14/2023 17:51	R330687



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041537-004  
**Matrix:** GROUNDWATER

**Work Order:** 23041537  
**Report Date:** 23-Jun-23  
**Client Sample ID:** JOP\_G005  
**Collection Date:** 05/03/2023 17:01

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	06/15/2023 17:14	R330687



**Client:** Ramboll  
**Client Project:** JOP-23Q2

**Work Order:** 23041537  
**Report Date:** 23-Jun-23

**Lab ID:** 23041537-005

**Client Sample ID:** JOP\_G006

**Matrix:** GROUNDWATER

**Collection Date:** 05/03/2023 17:35

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	06/15/2023 17:14	R330687



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041537-006  
**Matrix:** GROUNDWATER

**Work Order:** 23041537  
**Report Date:** 23-Jun-23  
**Client Sample ID:** JOP\_G007  
**Collection Date:** 05/03/2023 16:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	06/15/2023 17:14	R330687





**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041537-007  
**Matrix:** GROUNDWATER

**Work Order:** 23041537  
**Report Date:** 23-Jun-23  
**Client Sample ID:** JOP\_G008  
**Collection Date:** 05/03/2023 15:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	06/15/2023 17:14	R330687



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041537-008  
**Matrix:** GROUNDWATER

**Work Order:** 23041537  
**Report Date:** 23-Jun-23  
**Client Sample ID:** JOP\_G009  
**Collection Date:** 05/03/2023 13:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	06/15/2023 17:14	R330687



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041537-009  
**Matrix:** GROUNDWATER

**Work Order:** 23041537  
**Report Date:** 23-Jun-23  
**Client Sample ID:** JOP\_G010  
**Collection Date:** 05/03/2023 15:12

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	06/15/2023 17:14	R330687



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041537-010  
**Matrix:** GROUNDWATER

**Work Order:** 23041537  
**Report Date:** 23-Jun-23  
**Client Sample ID:** JOP\_G011  
**Collection Date:** 05/03/2023 10:10

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	06/15/2023 17:14	R330687



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041537-011  
**Matrix:** GROUNDWATER

**Work Order:** 23041537  
**Report Date:** 23-Jun-23  
**Client Sample ID:** JOP\_G051&D  
**Collection Date:** 05/03/2023 9:28

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	06/15/2023 17:14	R330687



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041537-012  
**Matrix:** GROUNDWATER

**Work Order:** 23041537  
**Report Date:** 23-Jun-23  
**Client Sample ID:** JOP\_G052&D  
**Collection Date:** 05/03/2023 14:08

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	06/15/2023 17:14	R330687



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041537-013  
**Matrix:** GROUNDWATER

**Work Order:** 23041537  
**Report Date:** 23-Jun-23  
**Client Sample ID:** JOP\_G053&D  
**Collection Date:** 05/03/2023 16:18

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	06/15/2023 17:14	R330687





**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041537-014  
**Matrix:** GROUNDWATER

**Work Order:** 23041537  
**Report Date:** 23-Jun-23  
**Client Sample ID:** JOP\_G054&D  
**Collection Date:** 05/03/2023 12:18

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	06/15/2023 17:14	R330687



**Client:** Ramboll  
**Client Project:** JOP-23Q2  
**Lab ID:** 23041537-015  
**Matrix:** AQUEOUS

**Work Order:** 23041537  
**Report Date:** 23-Jun-23  
**Client Sample ID:** Field Blank  
**Collection Date:** 05/03/2023 18:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	06/15/2023 17:14	R330687



## Sample Summary

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

**Client:** Ramboll  
**Client Project:** JOP-23Q2

**Work Order:** 23041537  
**Report Date:** 23-Jun-23

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
23041537-001	JOP_G001&D	Groundwater	1	05/02/2023 9:26
23041537-002	JOP_G002&D	Groundwater	1	05/03/2023 8:49
23041537-003	JOP_G003	Groundwater	1	05/03/2023 8:08
23041537-004	JOP_G005	Groundwater	1	05/03/2023 17:01
23041537-005	JOP_G006	Groundwater	1	05/03/2023 17:35
23041537-006	JOP_G007	Groundwater	1	05/03/2023 16:13
23041537-007	JOP_G008	Groundwater	1	05/03/2023 15:45
23041537-008	JOP_G009	Groundwater	1	05/03/2023 13:13
23041537-009	JOP_G010	Groundwater	1	05/03/2023 15:12
23041537-010	JOP_G011	Groundwater	1	05/03/2023 10:10
23041537-011	JOP_G051&D	Groundwater	1	05/03/2023 9:28
23041537-012	JOP_G052&D	Groundwater	1	05/03/2023 14:08
23041537-013	JOP_G053&D	Groundwater	1	05/03/2023 16:18
23041537-014	JOP_G054&D	Groundwater	1	05/03/2023 12:18
23041537-015	Field Blank	Aqueous	1	05/03/2023 18:45



## Dates Report

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

**Client:** Ramboll

**Work Order:** 23041537

**Client Project:** JOP-23Q2

**Report Date:** 23-Jun-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
23041537-001A	JOP_G001&D	05/02/2023 9:26	05/04/2023 8:10		
See Attached for Subcontracting Analysis		06/14/2023 17:51			
23041537-002A	JOP_G002&D	05/03/2023 8:49	05/04/2023 8:10		
See Attached for Subcontracting Analysis		06/14/2023 17:51			
23041537-003A	JOP_G003	05/03/2023 8:08	05/04/2023 8:10		
See Attached for Subcontracting Analysis		06/14/2023 17:51			
23041537-004A	JOP_G005	05/03/2023 17:01	05/04/2023 8:10		
See Attached for Subcontracting Analysis		06/15/2023 17:14			
23041537-005A	JOP_G006	05/03/2023 17:35	05/04/2023 8:10		
See Attached for Subcontracting Analysis		06/15/2023 17:14			
23041537-006A	JOP_G007	05/03/2023 16:13	05/04/2023 8:10		
See Attached for Subcontracting Analysis		06/15/2023 17:14			
23041537-007A	JOP_G008	05/03/2023 15:45	05/04/2023 8:10		
See Attached for Subcontracting Analysis		06/15/2023 17:14			
23041537-008A	JOP_G009	05/03/2023 13:13	05/04/2023 8:10		
See Attached for Subcontracting Analysis		06/15/2023 17:14			
23041537-009A	JOP_G010	05/03/2023 15:12	05/04/2023 8:10		
See Attached for Subcontracting Analysis		06/15/2023 17:14			
23041537-010A	JOP_G011	05/03/2023 10:10	05/04/2023 8:10		
See Attached for Subcontracting Analysis		06/15/2023 17:14			
23041537-011A	JOP_G051&D	05/03/2023 9:28	05/04/2023 8:10		
See Attached for Subcontracting Analysis		06/15/2023 17:14			
23041537-012A	JOP_G052&D	05/03/2023 14:08	05/04/2023 8:10		
See Attached for Subcontracting Analysis		06/15/2023 17:14			
23041537-013A	JOP_G053&D	05/03/2023 16:18	05/04/2023 8:10		
See Attached for Subcontracting Analysis		06/15/2023 17:14			
23041537-014A	JOP_G054&D	05/03/2023 12:18	05/04/2023 8:10		
See Attached for Subcontracting Analysis		06/15/2023 17:14			
23041537-015A	Field Blank	05/03/2023 18:45	05/04/2023 8:10		
See Attached for Subcontracting Analysis		06/15/2023 17:14			



## Receiving Check List

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

Client: Ramboll

Work Order: 23041537

Client Project: JOP-23Q2

Report Date: 23-Jun-23

Carrier: Joe Riley

Received By: ANC

Completed by:

*Allison Colin*

Reviewed by:

*Elizabeth A. Hurley*

On:

On:

04-May-23

04-May-23

Allison Colin

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

- |   |   |   |  |                                  |
|---|---|---|--|----------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             | Not Present <input type="checkbox"/>   | Temp °C <b>4.2</b>               |
| Type of thermal preservation?                           | None <input type="checkbox"/>           | Ice <input checked="" type="checkbox"/> | Blue Ice <input type="checkbox"/>      | Dry Ice <input type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Reported field parameters measured:                     | Field <input type="checkbox"/>          | Lab <input type="checkbox"/>            | NA <input checked="" type="checkbox"/> |                                  |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |

*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 <input type="checkbox"/>            | No <input type="checkbox"/> | No VOA vials <input checked="" type="checkbox"/>      |
| Water - TOX containers have zero headspace?               | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | No TOX containers <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt?                       | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/>                           |
| NPDES/CWA TCN interferences checked/treated in the field? | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/>                |

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

pH strip #88374. - CET/acolin - 5/4/2023 1:46:12 PM

### CHAIN-OF-CUSTODY / Analytical Request Document

ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 JOPPA POWER PLANT, EAST WASH POND

APPENDIX A  
 JOP 257 401

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

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: <u>Vistra Corp</u>		Report To: <u>Brian Voelker</u>		Attention: <u>Jason Stuckey</u>	
Address: <u>13498 E. 900th St</u>		Copy To: <u>Jason Stuckey</u>		Company Name: <u>Vistra Corp</u>	
Email To: <u>Brian.Voelker@VistraCorp.com</u>		Purchase Order No.:		Address: <u>see Section A</u>	
Phone: <u>(217) 753-8911</u> Fax:		Project Name:		Quote Reference:	
Requested Due Date/TAT: <u>10 day</u>		Project Number: <u>2285</u>		Profile #:	
<b>REGULATORY AGENCY</b>					
NPDES		GROUND WATER		DRINKING WATER	
UST		RCRA		OTHER	
Site Location				STATE: <u>IL</u>	

ITEM #	Section D Required Client Information  <b>SAMPLE ID</b> (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/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 ↓	Requested Analysis Filtered (Y/N)							Residual Chlorine (Y/N)	Project No./ Lab I.D.	
					DATE	TIME			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol		Other	JOP-257-401	JOP-845-401	JOP-SUP-000						
1	JOP_G001&D				05/02/23	0926		2	2								✓	✓								230241537-001
2	JOP_G002&D				05/03/23	0849											✓	✓								002
3	JOP_G003					1808											✓	✓								003
4	JOP_G005					701											✓	✓								004
5	JOP_G006					733											✓	✓								005
6	JOP_G007					1613											✓	✓								006
7	JOP_G008					1545											✓	✓								007
8	JOP_G009					1313											✓	✓								008
9	JOP_G010					1312											✓	✓								009
10	JOP_G011					1010											✓	✓								010
11	JOP_G051&D					0925											✓	✓								011
12	JOP_G052&D					405											✓	✓								012
13	JOP_G053&D					1615											✓	✓								013
14	JOP_G054&D					218											✓	✓								014
15	JOP_XPW01_pore					1052																				
16	JOP_XPW02_pore					1115																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
JOP-23Q2-Rev 0-Part A-Lab	<i>[Signature]</i>	05/04/23	0810	<i>[Signature]</i>	5/4/23	0810	5611	Y	N	Y
<i>Ra230/228, only.</i>							5611			

<b>SAMPLER NAME AND SIGNATURE</b>			Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	<i>[Signature]</i>					
SIGNATURE of SAMPLER:	DATE Signed (MM/DD/YY):	<i>[Signature]</i>	05/04/23	800		

*230 5-4-23*

# CHAIN-OF-CUSTODY / Analytical Request Document

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

JOP-257-401

Page: **2** of **2**

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		<b>REGULATORY AGENCY</b>	
Company: <b>Vistra Corp</b>		Report To: <b>Brian Voelker</b>		Attention: <b>Jason Stuckey</b>		NPDES      GROUND WATER      DRINKING WATER	
Address: <b>13498 E. 900th St</b>		Copy To: <b>Jason Stuckey</b>		Company Name: <b>Vistra Corp</b>		UST      RCRA      OTHER	
Email To: <b>Brian.Voelker@VistraCorp.com</b>		Purchase Order No.:		Address: <b>see Section A</b>		Site Location	
Phone: <b>(217) 753-8911</b> Fax:		Project Name:		Quote Reference:		STATE:      IL	
Requested Due Date/TAT: <b>10 day</b>		Project Number: <b>2285</b>		Project Manager:		Profile #:	

ITEM #	Section D Required Client Information  <b>SAMPLE ID</b> (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX      CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL OL WIPE WP AIR AR OTHER OT TISSUE TS	MATRIX CODE <small>(see valid codes to left)</small>	SAMPLE TYPE <small>(G=GRAB C=COMP)</small>	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Requested Analysis Filtered (Y/N)												Residual Chlorine (Y/N)	Project No./ Lab I.D.						
					DATE	TIME			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Analysis Test ↓	Y	N	Y	N	Y	N	Y	N	Y	N			Y	N	Y	N	Y	N
																		JOP-257-401																	
1	JOP_XPW03_pore				05/03/23	1139																													
2	JOP_XSG01				05/04/23	1351																													
3	JOP_YSG02					NA																													
4	FIELD BLANK				5/3/23	1945		2	2																										
5						TE SW 5/4/23																													
6																																			
7																																			
8																																			
9																																			
10																																			
11																																			
12																																			
13																																			
14																																			
15																																			
16																																			

ADDITIONAL COMMENTS	REQUISISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
JOP-23Q2-Rev 0-Part A-Lab	<i>[Signature]</i>	05/04/23	0810	<i>Alison Cole</i>	5/4/23	0810				
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>Joel...</i>		SIGNATURE of SAMPLER: <i>[Signature]</i>		DATE Signed (MM/DD/YY): <i>05/04/23</i>						



# ANALYTICAL REPORT

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

APPENDIX A.  
JOP-257-401

June 23, 2023

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

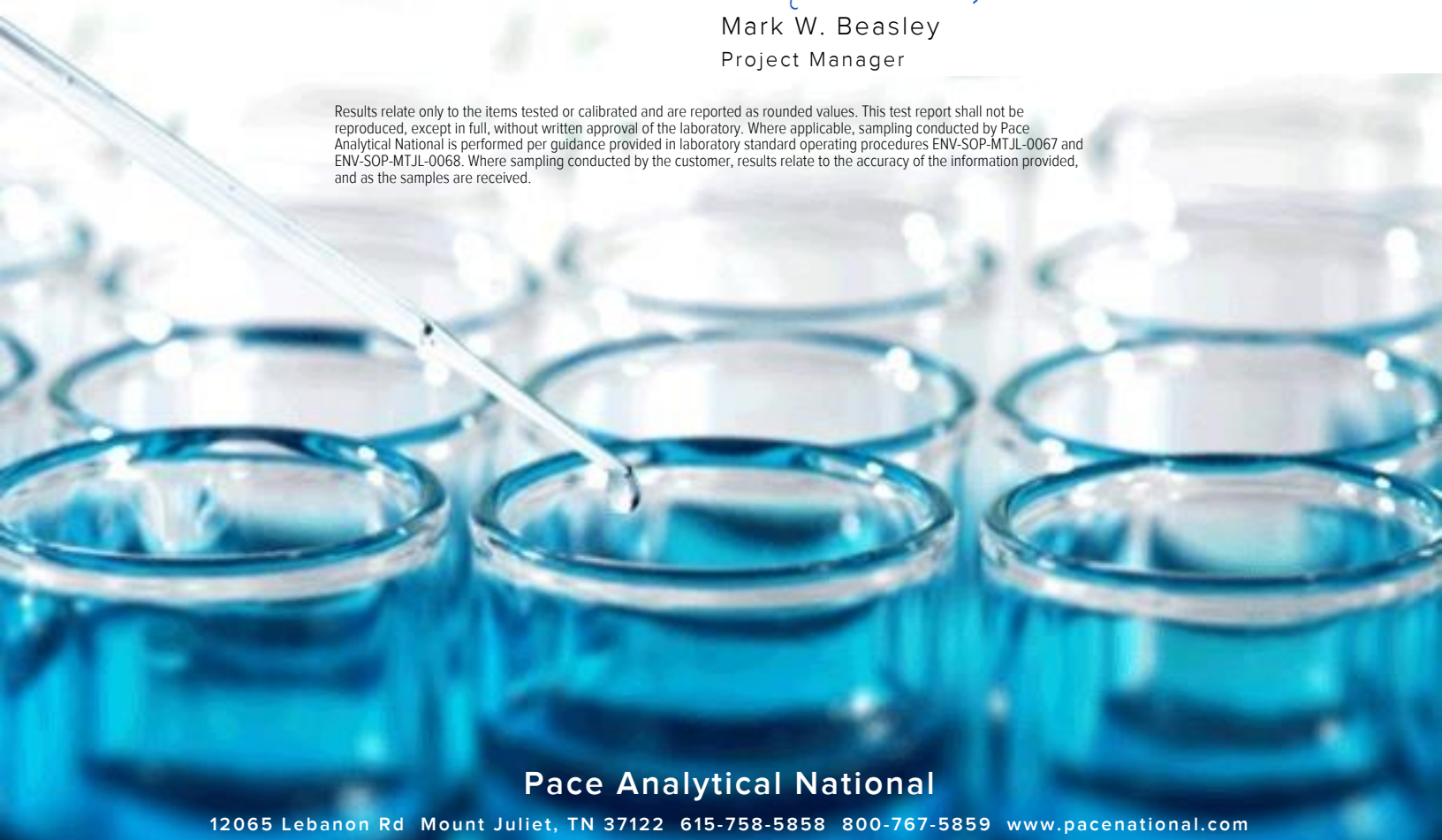
## TEKLAB, Inc.

Sample Delivery Group: L1614550  
 Samples Received: 05/10/2023  
 Project Number: 23041537  
 Description:  
 Site: 001  
 Report To: Elizabeth Hurley  
 5445 Horseshoe Lake Road  
 Collinsville, IL 62234

Entire Report Reviewed By:

Mark W. Beasley  
Project Manager

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



Pace Analytical National

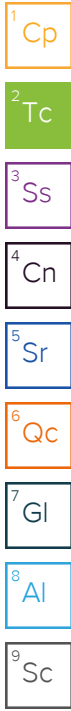
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com



# TABLE OF CONTENTS

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

<b>Cp: Cover Page</b>		<b>1</b>
<b>Tc: Table of Contents</b>		<b>2</b>
<b>Ss: Sample Summary</b>		<b>3</b>
<b>Cn: Case Narrative</b>		<b>6</b>
<b>Sr: Sample Results</b>		<b>7</b>
23041537-001 L1614550-01		7
23041537-002 L1614550-02		8
23041537-003 L1614550-03		9
23041537-004 L1614550-04		10
23041537-005 L1614550-05		11
23041537-006 L1614550-06		12
23041537-007 L1614550-07		13
23041537-008 L1614550-08		14
23041537-009 L1614550-09		15
23041537-010 L1614550-10		16
23041537-011 L1614550-11		17
23041537-015 L1614550-12		18
23041537-012 L1614550-13		19
23041537-013 L1614550-14		20
23041537-014 L1614550-15		21
<b>Qc: Quality Control Summary</b>		<b>22</b>
Radiochemistry by Method 904/9320		22
Radiochemistry by Method SM7500Ra B M		24
<b>Gl: Glossary of Terms</b>		<b>26</b>
<b>Al: Accreditations &amp; Locations</b>		<b>27</b>
<b>Sc: Sample Chain of Custody</b>		<b>28</b>



# SAMPLE SUMMARY

## ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

APPENDIX A.

Collected by **JOPPA POWER PLANT EAST ASH POND**  
 Joseph Riley      05/02/23 09:26      05/10/23 09:06  
**JOP-257-401**

### 23041537-001 L1614550-01 Non-Potable Water

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2073396	1	06/08/23 08:06	06/14/23 17:51	SNR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2074499	1	06/14/23 16:02	06/16/23 17:46	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2074499	1	06/14/23 16:02	06/16/23 17:46	RGT	Mt. Juliet, TN

Collected by **Joseph Riley**      Collected date/time **05/03/23 08:49**      Received date/time **05/10/23 09:00**

### 23041537-002 L1614550-02 Non-Potable Water

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2073396	1	06/08/23 08:06	06/14/23 17:51	SNR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2074499	1	06/14/23 16:02	06/16/23 17:46	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2074499	1	06/14/23 16:02	06/16/23 17:46	RGT	Mt. Juliet, TN

Collected by **Joseph Riley**      Collected date/time **05/03/23 08:08**      Received date/time **05/10/23 09:00**

### 23041537-003 L1614550-03 Non-Potable Water

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2073396	1	06/08/23 08:06	06/14/23 17:51	SNR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2074499	1	06/14/23 16:02	06/16/23 17:46	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2074499	1	06/14/23 16:02	06/16/23 17:46	RGT	Mt. Juliet, TN

Collected by **Joseph Riley**      Collected date/time **05/03/23 17:01**      Received date/time **05/10/23 09:00**

### 23041537-004 L1614550-04 Non-Potable Water

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2074004	1	06/08/23 13:31	06/15/23 17:14	SNR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2074499	1	06/14/23 16:02	06/16/23 17:46	SNR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2074499	1	06/14/23 16:02	06/16/23 17:46	RGT	Mt. Juliet, TN

Collected by **Joseph Riley**      Collected date/time **05/03/23 17:35**      Received date/time **05/10/23 09:00**

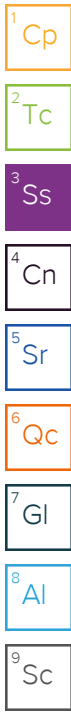
### 23041537-005 L1614550-05 Non-Potable Water

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2074004	1	06/08/23 13:31	06/15/23 17:14	SNR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2074499	1	06/14/23 16:02	06/16/23 17:46	SNR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2074499	1	06/14/23 16:02	06/16/23 17:46	RGT	Mt. Juliet, TN

Collected by **Joseph Riley**      Collected date/time **05/03/23 16:13**      Received date/time **05/10/23 09:00**

### 23041537-006 L1614550-06 Non-Potable Water

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2074004	1	06/08/23 13:31	06/15/23 17:14	SNR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2074499	1	06/14/23 16:02	06/16/23 17:46	SNR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2074499	1	06/14/23 16:02	06/16/23 17:46	RGT	Mt. Juliet, TN



# SAMPLE SUMMARY

## ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

APPENDIX A.

Collected by **JOPPA POWER PLANT EAST ASH POND**  
 Joseph Riley      05/03/23 15:45      05/10/23 09:00  
**JOP-257-401**

### 23041537-007 L1614550-07 Non-Potable Water

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2074004	1	06/08/23 13:31	06/15/23 17:14	SNR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2074499	1	06/14/23 16:02	06/16/23 17:46	SNR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2074499	1	06/14/23 16:02	06/16/23 17:46	RGT	Mt. Juliet, TN

Collected by **Joseph Riley**      Collected date/time **05/03/23 13:13**      Received date/time **05/10/23 09:00**

### 23041537-008 L1614550-08 Non-Potable Water

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2074004	1	06/08/23 13:31	06/15/23 17:14	SNR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2074502	1	06/15/23 13:21	06/17/23 16:12	SNR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2074502	1	06/15/23 13:21	06/17/23 16:12	RGT	Mt. Juliet, TN

Collected by **Joseph Riley**      Collected date/time **05/03/23 15:12**      Received date/time **05/10/23 09:00**

### 23041537-009 L1614550-09 Non-Potable Water

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2074004	1	06/08/23 13:31	06/15/23 17:14	SNR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2074502	1	06/15/23 13:21	06/17/23 16:12	SNR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2074502	1	06/15/23 13:21	06/17/23 16:12	RGT	Mt. Juliet, TN

Collected by **Joseph Riley**      Collected date/time **05/03/23 10:10**      Received date/time **05/10/23 09:00**

### 23041537-010 L1614550-10 Non-Potable Water

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2074004	1	06/08/23 13:31	06/15/23 17:14	SNR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2074502	1	06/15/23 13:21	06/17/23 16:12	SNR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2074502	1	06/15/23 13:21	06/17/23 16:12	RGT	Mt. Juliet, TN

Collected by **Joseph Riley**      Collected date/time **05/03/23 09:28**      Received date/time **05/10/23 09:00**

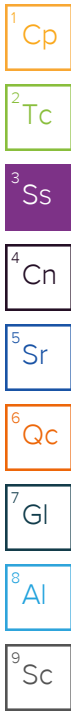
### 23041537-011 L1614550-11 Non-Potable Water

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2074004	1	06/08/23 13:31	06/15/23 17:14	SNR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2074502	1	06/15/23 13:21	06/17/23 16:12	SNR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2074502	1	06/15/23 13:21	06/17/23 16:12	RGT	Mt. Juliet, TN

Collected by **Joseph Riley**      Collected date/time **05/03/23 18:45**      Received date/time **05/10/23 09:00**

### 23041537-015 L1614550-12 Non-Potable Water

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2074004	1	06/08/23 13:31	06/15/23 17:14	SNR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2074502	1	06/15/23 13:21	06/17/23 16:12	SNR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2074502	1	06/15/23 13:21	06/17/23 16:12	RGT	Mt. Juliet, TN



# SAMPLE SUMMARY

## ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

APPENDIX A.

Collected by **JOPPA POWER PLANT EAST ASH POND**  
 Joseph Riley      05/03/23 14:08      05/10/23 09:00  
**JOP-257-401**

### 23041537-012 L1614550-13 Non-Potable Water

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2074004	1	06/08/23 13:31	06/15/23 17:14	SNR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2074502	1	06/15/23 13:21	06/17/23 16:12	SNR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2074502	1	06/15/23 13:21	06/17/23 16:12	RGT	Mt. Juliet, TN

Collected by      Collected date/time      Received date/time  
 Joseph Riley      05/03/23 16:18      05/10/23 09:00

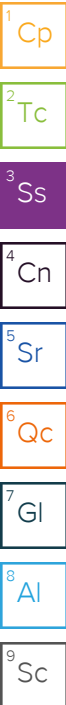
### 23041537-013 L1614550-14 Non-Potable Water

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2074004	1	06/08/23 13:31	06/15/23 17:14	SNR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2074502	1	06/15/23 13:21	06/17/23 16:12	SNR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2074502	1	06/15/23 13:21	06/17/23 16:12	RGT	Mt. Juliet, TN

Collected by      Collected date/time      Received date/time  
 Joseph Riley      05/03/23 12:18      05/10/23 09:00

### 23041537-014 L1614550-15 Non-Potable Water

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2074004	1	06/08/23 13:31	06/15/23 17:14	SNR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2074502	1	06/15/23 13:21	06/17/23 16:12	SNR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2074502	1	06/15/23 13:21	06/17/23 16:12	RGT	Mt. Juliet, TN



# CASE NARRATIVE

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

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



Mark W. Beasley  
Project Manager

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.388	J	0.345	0.621	06/14/2023 17:51	<a href="#">WG2073396</a>
(T) Barium	84.0			30.0-143	06/14/2023 17:51	<a href="#">WG2073396</a>
(T) Yttrium	114			30.0-136	06/14/2023 17:51	<a href="#">WG2073396</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.826		0.451	0.695	06/16/2023 17:46	<a href="#">WG2074499</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.438		0.290	0.311	06/16/2023 17:46	<a href="#">WG2074499</a>
(T) Barium-133	94.2			30.0-143	06/16/2023 17:46	<a href="#">WG2074499</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.0275	<u>U</u>	0.329	0.604	06/14/2023 17:51	<a href="#">WG2073396</a>
(T) Barium	77.7			30.0-143	06/14/2023 17:51	<a href="#">WG2073396</a>
(T) Yttrium	111			30.0-136	06/14/2023 17:51	<a href="#">WG2073396</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.475	<u>J</u>	0.446	0.679	06/16/2023 17:46	<a href="#">WG2074499</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.475		0.301	0.310	06/16/2023 17:46	<a href="#">WG2074499</a>
(T) Barium-133	91.2			30.0-143	06/16/2023 17:46	<a href="#">WG2074499</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

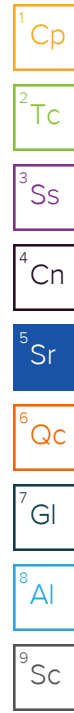
Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.0661	<u>U</u>	0.309	0.569	06/14/2023 17:51	<a href="#">WG2073396</a>
(T) Barium	88.9			30.0-143	06/14/2023 17:51	<a href="#">WG2073396</a>
(T) Yttrium	89.4			30.0-136	06/14/2023 17:51	<a href="#">WG2073396</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.754		0.484	0.640	06/16/2023 17:46	<a href="#">WG2074499</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.754		0.373	0.294	06/16/2023 17:46	<a href="#">WG2074499</a>
(T) Barium-133	91.7			30.0-143	06/16/2023 17:46	<a href="#">WG2074499</a>





Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.279	J	0.274	0.488	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Barium	100			30.0-143	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Yttrium	97.3			30.0-136	06/15/2023 17:14	<a href="#">WG2074004</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.550	J	0.394	0.616	06/16/2023 17:46	<a href="#">WG2074499</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.271	J	0.283	0.376	06/16/2023 17:46	<a href="#">WG2074499</a>
(T) Barium-133	83.9			30.0-143	06/16/2023 17:46	<a href="#">WG2074499</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.274	J	0.326	0.583	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Barium	87.6			30.0-143	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Yttrium	107			30.0-136	06/15/2023 17:14	<a href="#">WG2074004</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.869		0.445	0.617	06/16/2023 17:46	<a href="#">WG2074499</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.595		0.303	0.201	06/16/2023 17:46	<a href="#">WG2074499</a>
(T) Barium-133	91.8			30.0-143	06/16/2023 17:46	<a href="#">WG2074499</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.524	J	0.332	0.588	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Barium	82.2			30.0-143	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Yttrium	107			30.0-136	06/15/2023 17:14	<a href="#">WG2074004</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.49		0.511	0.651	06/16/2023 17:46	<a href="#">WG2074499</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.970		0.388	0.279	06/16/2023 17:46	<a href="#">WG2074499</a>
(T) Barium-133	88.9			30.0-143	06/16/2023 17:46	<a href="#">WG2074499</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.708		0.367	0.647	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Barium	82.1			30.0-143	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Yttrium	93.9			30.0-136	06/15/2023 17:14	<a href="#">WG2074004</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.02		0.446	0.711	06/16/2023 17:46	<a href="#">WG2074499</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.309		0.254	0.295	06/16/2023 17:46	<a href="#">WG2074499</a>
(T) Barium-133	92.7			30.0-143	06/16/2023 17:46	<a href="#">WG2074499</a>

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

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.0708	<u>U</u>	0.275	0.502	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Barium	91.4			30.0-143	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Yttrium	104			30.0-136	06/15/2023 17:14	<a href="#">WG2074004</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.151	<u>U</u>	0.345	0.586	06/17/2023 16:12	<a href="#">WG2074502</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.151	<u>J</u>	0.209	0.303	06/17/2023 16:12	<a href="#">WG2074502</a>
(T) Barium-133	96.7			30.0-143	06/17/2023 16:12	<a href="#">WG2074502</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.178	<u>U</u>	0.296	0.543	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Barium	84.9			30.0-143	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Yttrium	98.1			30.0-136	06/15/2023 17:14	<a href="#">WG2074004</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.429	<u>J</u>	0.412	0.622	06/17/2023 16:12	<a href="#">WG2074502</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.429		0.287	0.303	06/17/2023 16:12	<a href="#">WG2074502</a>
(T) Barium-133	93.0			30.0-143	06/17/2023 16:12	<a href="#">WG2074502</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

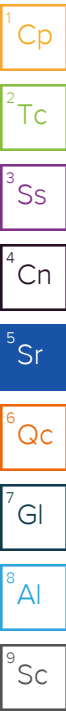
Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.454	J	0.335	0.597	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Barium	66.3			30.0-143	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Yttrium	100			30.0-136	06/15/2023 17:14	<a href="#">WG2074004</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.804		0.425	0.658	06/17/2023 16:12	<a href="#">WG2074502</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.350		0.261	0.276	06/17/2023 16:12	<a href="#">WG2074502</a>
(T) Barium-133	97.6			30.0-143	06/17/2023 16:12	<a href="#">WG2074502</a>



Radiochemistry by Method 904/9320

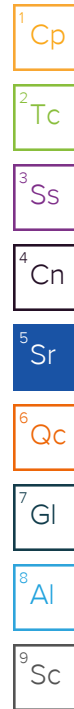
Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.726		0.209	0.357	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Barium	99.4			30.0-143	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Yttrium	110			30.0-136	06/15/2023 17:14	<a href="#">WG2074004</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.31		0.399	0.499	06/17/2023 16:12	<a href="#">WG2074502</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.582		0.340	0.348	06/17/2023 16:12	<a href="#">WG2074502</a>
(T) Barium-133	90.7			30.0-143	06/17/2023 16:12	<a href="#">WG2074502</a>





Radiochemistry by Method 904/9320

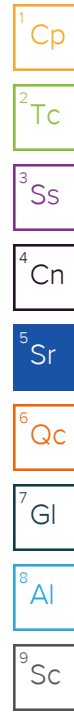
Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.0580	<u>U</u>	0.299	0.543	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Barium	105			30.0-143	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Yttrium	91.0			30.0-136	06/15/2023 17:14	<a href="#">WG2074004</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.423	<u>J</u>	0.391	0.576	06/17/2023 16:12	<a href="#">WG2074502</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.423		0.252	0.193	06/17/2023 16:12	<a href="#">WG2074502</a>
(T) Barium-133	96.0			30.0-143	06/17/2023 16:12	<a href="#">WG2074502</a>



Radiochemistry by Method 904/9320

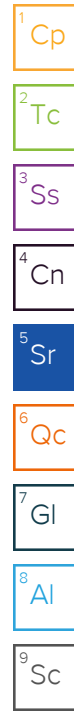
Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.130	<u>U</u>	0.311	0.566	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Barium	90.0			30.0-143	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Yttrium	75.8			30.0-136	06/15/2023 17:14	<a href="#">WG2074004</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.169	<u>U</u>	0.341	0.621	06/17/2023 16:12	<a href="#">WG2074502</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0391	<u>U</u>	0.140	0.255	06/17/2023 16:12	<a href="#">WG2074502</a>
(T) Barium-133	97.2			30.0-143	06/17/2023 16:12	<a href="#">WG2074502</a>



Radiochemistry by Method 904/9320

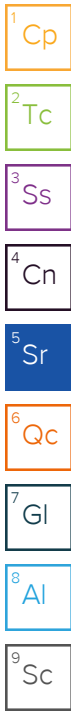
Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.104	<u>U</u>	0.231	0.418	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Barium	102			30.0-143	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Yttrium	116			30.0-136	06/15/2023 17:14	<a href="#">WG2074004</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.252	<u>J</u>	0.301	0.501	06/17/2023 16:12	<a href="#">WG2074502</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.148	<u>J</u>	0.193	0.276	06/17/2023 16:12	<a href="#">WG2074502</a>
(T) Barium-133	99.3			30.0-143	06/17/2023 16:12	<a href="#">WG2074502</a>



Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.510	<u>U</u>	0.286	0.534	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Barium	96.9			30.0-143	06/15/2023 17:14	<a href="#">WG2074004</a>
(T) Yttrium	99.4			30.0-136	06/15/2023 17:14	<a href="#">WG2074004</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.166	<u>U</u>	0.375	0.642	06/17/2023 16:12	<a href="#">WG2074502</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.166	<u>J</u>	0.243	0.357	06/17/2023 16:12	<a href="#">WG2074502</a>
(T) Barium-133	95.7			30.0-143	06/17/2023 16:12	<a href="#">WG2074502</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3938842-1 06/14/23 17:51

Analyte	MB Result	MB Qualifier	MB Uncertainty	MB MDA
	pCi/l		+ / -	pCi/l
Radium-228	0.488		0.154	0.268
(T) Barium	88.7		88.7	
(T) Yttrium	104		104	

L1619139-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1619139-09 06/14/23 17:51 • (DUP) R3938842-5 06/14/23 17:51

Analyte	Original Result	Original Uncertainty	Original MDA	DUP Result	DUP Uncertainty	DUP MDA	Dilution	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	+ / -	pCi/l		%			%	
Radium-228	0.206	0.361	0.661	0.734	0.414	0.661	1	112	0.960	J	20	3
(T) Barium	91.1			80.7	80.7							
(T) Yttrium	103			97.4	97.4							

Laboratory Control Sample (LCS)

(LCS) R3938842-2 06/14/23 17:51

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-228	5.00	4.68	93.5	80.0-120	
(T) Barium			99.0		
(T) Yttrium			90.4		

L1619136-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1619136-03 06/14/23 17:51 • (MS) R3938842-3 06/14/23 17:51 • (MSD) R3938842-4 06/14/23 17:51

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-228	16.7	0.939	15.8	18.5	89.1	105	1	70.0-130			15.3		20
(T) Barium		79.0			81.7	85.2							
(T) Yttrium		105			108	95.2							



Method Blank (MB)

(MB) R3940142-1 06/15/23 17:14

Analyte	MB Result	MB Qualifier	MB Uncertainty	MB MDA
	pCi/l		+ / -	pCi/l
Radium-228	0.0748	<u>U</u>	0.149	0.270
(T) Barium	100		100	
(T) Yttrium	92.9		92.9	

L1615408-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1615408-01 06/15/23 17:14 • (DUP) R3940142-5 06/15/23 17:14

Analyte	Original Result	Original Uncertainty	Original MDA	DUP Result	DUP Uncertainty	DUP MDA	Dilution	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	+ / -	pCi/l		%			%	
Radium-228	0.0815	0.375	0.686	0.476	0.430	0.686	1	141	0.691	<u>J</u>	20	3
(T) Barium	101			94.0	94.0							
(T) Yttrium	94.6			85.1	85.1							

Laboratory Control Sample (LCS)

(LCS) R3940142-2 06/15/23 17:14

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-228	5.00	4.07	81.3	80.0-120	
(T) Barium			114		
(T) Yttrium			112		

L1615408-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1615408-04 06/15/23 17:14 • (MS) R3940142-3 06/15/23 17:14 • (MSD) R3940142-4 06/15/23 17:14

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-228	16.7	0.814	13.8	15.5	77.8	88.2	1	70.0-130			11.8		20
(T) Barium		107			106	108							
(T) Yttrium		105			104	100							

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3938909-1 06/16/23 17:46

Analyte	MB Result	MB Qualifier	MB Uncertainty	MB MDA
	pCi/l		+ / -	pCi/l
Radium-226	0.00379	<u>U</u>	0.0352	0.0716
(T) Barium-133	90.6		90.6	

L1619139-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1619139-04 06/16/23 17:47 • (DUP) R3938909-5 06/16/23 17:46

Analyte	Original Result	Original Uncertainty	Original MDA	DUP Result	DUP Uncertainty	DUP MDA	Dilution	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	+ / -	pCi/l		%			%	
Radium-226	0.0414	0.140	0.273	0.175	0.247	0.273	1	124	0.471	<u>J</u>	20	3
(T) Barium-133	91.3			84.9	84.9							

Laboratory Control Sample (LCS)

(LCS) R3938909-2 06/16/23 17:46

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-226	5.01	5.35	107	80.0-120	
(T) Barium-133			87.7		

L1614550-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1614550-02 06/16/23 17:46 • (MS) R3938909-3 06/16/23 17:46 • (MSD) R3938909-4 06/16/23 17:46

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-226	20.0	0.475	21.6	22.2	105	109	1	75.0-125			3.11		20
(T) Barium-133		91.2			88.6	87.5							



Method Blank (MB)

(MB) R3938562-1 06/17/23 16:12

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-226	0.0228	↓	0.0279	0.0421
(T) Barium-133	90.2		90.2	

L1614550-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1614550-14 06/17/23 16:12 • (DUP) R3938562-5 06/17/23 16:12

Analyte	Original Result pCi/l	Original Uncertainty + / -	Original MDA pCi/l	DUP Result pCi/l	DUP Uncertainty + / -	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.148	0.193	0.276	0.0299	0.176	0.276	1	133	0.451	U	20	3
(T) Barium-133	99.3			99.4	99.4							

Laboratory Control Sample (LCS)

(LCS) R3938562-2 06/17/23 16:12

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.01	4.64	92.7	80.0-120	
(T) Barium-133			112		

L1614550-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1614550-12 06/17/23 16:12 • (MS) R3938562-3 06/17/23 16:12 • (MSD) R3938562-4 06/17/23 16:12

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.423	18.8	19.2	91.9	94.0	1	75.0-125			2.21		20
(T) Barium-133		96.0			101	92.1							





# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

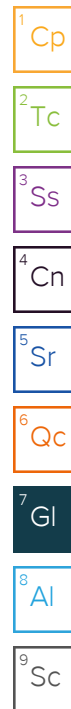
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

### Abbreviations and Definitions

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

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.



# ACCREDITATIONS & LOCATIONS

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

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

### 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

**A178**

Teklab Inc  
5445 Horseshoe Lake Road  
Collinsville, IL 62234

Cooler Temp:  Sampler:  QC Level:

Comments:   
Please analyze for Radium 226/228 on your standard turn around time.  
Samples collected from an IL site.  
Batch QC is required for all analyses requested. EDD requested..

Project#

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

Phone:

*UL6/4550*

**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. Any changes to analysis/methods must be approved by Teklab, Inc.

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix	Ra226/228													
-01	23041537-001	5/2/23 9.26	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-02	23041537-002	5/3/23 8.49	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-03	23041537-003	5/3/23 8.08	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-04	23041537-004	5/3/23 17.01	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-05	23041537-005	5/3/23 17.35	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-06	23041537-006	5/3/23 16.13	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-07	23041537-007	5/3/23 15.45	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-08	23041537-008	5/3/23 13.13	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-09	23041537-009	5/3/23 15.12	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-10	23041537-010	5/3/23 10.10	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-11	23041537-011	5/3/23 9.28	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Relinquished By	Date/Time	Received By	Date/Time
<i>Alison Cole (Fedex)</i>	<i>5/4/23</i>	<i>Harley Palutan</i>	<i>5/10/23 0900</i>



### 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 226/228 on your standard turn around time.  
Samples collected from an IL site.  
Batch QC is required for all analyses requested. EDD requested..

Project#

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

Phone:

*L16/4350*

**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. Any changes to analysis/methods must be approved by Teklab, Inc.

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix	Ra226/228													
-12	23041537-015	5/3/23 18.45	HNO3	Groundwater	<input checked="" type="checkbox"/>													
-13	↓ 012	↓ 1408	HNO3	Groundwater	<input checked="" type="checkbox"/>													
-14	↓ 013	↓ 1618	HNO3	Groundwater	<input checked="" type="checkbox"/>													
-15	↓ 014	↓ 1218	HNO3	Groundwater	<input checked="" type="checkbox"/>													
		SMA 5/4/23	HNO3	Groundwater														
			HNO3	Groundwater														
				Groundwater														
				Groundwater														
				Groundwater														
				Groundwater														

**Sample Receipt Checklist**

COC Seal Present/Intact:  Y  N If Applicable  
 COC Signed/Accurate:  Y  N VOA Zero Headspace:  Y  N  
 Bottles arrive intact:  Y  N Pres. Correct/Check:  Y  N  
 Correct bottles used:  Y  N  
 Sufficient volume sent:  Y  N  
 RAD Screen <0.5 mR/hr:  Y  N

*Relinquished By	Date/Time	Received By	Date/Time
<i>Attoni Cole (Fedex)</i>	<i>5/4/23</i>	<i>Hanky Robinson</i>	<i>5/10/23 0900</i>

Tracking Numbers	US A7 Temperature
0319 30161690	20.2 ± 0.20.2
0319 30161705	21.0 ± 0.21.0

U04550

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536
Technician	J. Riley/ J. Colp

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

WO Sample	Well ID	Date	Time hmm	Time (adj) hhmm	DTB (ft)	DTW (ft)	MP Elev (ft)	GW Elev (ft)	Well Condition	Sampling Device
001A	G01	5/2/2023	926	0926		40.56			Good	Bladder Pump
002A	G02	5/3/2023	849	0849		40.94			Good	Bladder Pump
003A	G03	5/3/2023	808	0808		35.97			Good	Bladder Pump
004A	G05	5/3/2023	1701	1701		40.85			Good	Bladder Pump
005A	G06	5/3/2023	1735	1735		37.95			Good	Bladder Pump
006A	G07	5/3/2023	1812	1812		38.15			Good	Bladder Pump
007A	G08	5/3/2023	1545	1545		29.73			Good	Bladder Pump
008A	G09	5/3/2023	1359	1359		39.04			Good	Bladder Pump
009A	G10	5/3/2023	1512	1512		39.3			Good	Bladder Pump
010A	G11	5/3/2023	1010	1010		45.1			Good	Bladder Pump
011A	G51D	5/3/2023	928	0928		41.82			Good	Bladder Pump
012A	G52D	5/3/2023	1408	1408		27.12			Good	Bladder Pump
013A	G53D	5/3/2023	1618	1618		35.75			Good	Bladder Pump
014A	G54D	5/3/2023	1218	1218		41.25			Good	Bladder Pump
015A	XPW01	5/3/2023	1052	1052		13.93			Good	Bladder Pump
016A	XPW02	5/3/2023	1115	1115		3.45			Good	Bladder Pump
017A	XPW03	5/3/2023	1139	1139		10.03			Good	Bladder Pump
018A	XSG01	05/15/2023	1033	1033		2.39				



FILE CREATEI 5/8/2023 18:30

DATE	TIME	SITE	DATA ID	Barometer Temp (°C)	Cond (µS/c	Sp Cond (µ	Sal (psu)	nLFC	Cond (µ	TDS (mg/L)	Resistivity (Sigma-T (s	Sigma (s)	
5/2/2023	9:14:08 AM	JOPPA	G01	745.8	15.4	569.4	697.6	0.34	707.9	453	1756.3	-0.7	-0.7
5/2/2023	9:17:07 AM	JOPPA	G01	745.9	15.5	575	702.8	0.34	713.1	457	1739	-0.7	-0.7
5/2/2023	9:20:07 AM	JOPPA	G01	745.9	15.5	592.2	723	0.36	733.6	470	1688.6	-0.7	-0.7
5/2/2023	9:23:07 AM	JOPPA	G01	745.9	15.3	563.2	690.7	0.34	701	449	1775.6	-0.7	-0.7
5/2/2023	9:26:07 AM	JOPPA	G01	746	15.5	558.1	682.1	0.33	692.1	443	1791.7	-0.7	-0.7
5/3/2023	7:59:03 AM	JOPPA	G03	750.3	15.2	573.3	705.8	0.35	716.5	459	1744.4	-0.7	-0.7
5/3/2023	8:02:03 AM	JOPPA	G03	750.3	15.2	561.6	691.4	0.34	701.7	449	1780.7	-0.7	-0.7
5/3/2023	8:05:03 AM	JOPPA	G03	750.4	15.2	553.8	681.1	0.33	691.3	443	1805.8	-0.7	-0.7
5/3/2023	8:08:03 AM	JOPPA	G03	750.3	15.3	548.8	674.4	0.33	684.5	438	1822	-0.7	-0.7
5/3/2023	8:46:07 AM	JOPPA	G02	750.3	13.6	388.8	497.5	0.24	505.7	323	2572.3	-0.5	-0.5
5/3/2023	8:49:07 AM	JOPPA	G02	750.3	14.3	392.7	493.9	0.24	501.7	321	2546.3	-0.6	-0.6
5/3/2023	9:22:13 AM	JOPPA	G51D	750.4	16.1	428	516.2	0.25	523.5	336	2336.3	-0.9	-0.9
5/3/2023	9:25:13 AM	JOPPA	G51D	750.3	16.2	424.7	510.6	0.25	517.8	332	2354.8	-0.9	-0.9
5/3/2023	9:28:13 AM	JOPPA	G51D	750.2	16.3	428.8	514.4	0.25	521.5	334	2332.3	-0.9	-0.9
5/3/2023	10:01:16 AM	JOPPA	G11	750.3	16.4	1155.7	1381.4	0.7	1400.3	898	865.2	-0.6	-0.6
5/3/2023	10:04:16 AM	JOPPA	G11	750.3	16.5	1285	1534.6	0.78	1555.5	997	778.2	-0.5	-0.5
5/3/2023	10:07:16 AM	JOPPA	G11	750.3	16.5	1298.7	1549.1	0.78	1570.1	1007	770	-0.5	-0.5
5/3/2023	10:10:16 AM	JOPPA	G11	750.3	16.5	1276.1	1523.2	0.77	1543.9	990	783.7	-0.5	-0.5
5/3/2023	10:40:00 AM	JOPPA	XPW01	749.9	16.4	1000.7	1197.1	0.6	1213.5	778	999.3	-0.7	-0.7
5/3/2023	10:43:00 AM	JOPPA	XPW01	750	16.6	1006.3	1198.8	0.6	1215	779	993.8	-0.7	-0.7
5/3/2023	10:46:00 AM	JOPPA	XPW01	750	16.7	1018.1	1209.9	0.61	1226.1	786	982.2	-0.7	-0.7
5/3/2023	10:49:00 AM	JOPPA	XPW01	750	16.7	1024.8	1218.1	0.61	1234.4	792	975.8	-0.7	-0.7
5/3/2023	10:52:00 AM	JOPPA	XPW01	750	16.7	1027.3	1220.5	0.61	1236.9	793	973.4	-0.7	-0.7
5/3/2023	11:09:22 AM	JOPPA	XPW02	750.3	16.9	5363.4	6340.7	3.48	6423.9	4121	186.4	1.5	1.5
5/3/2023	11:12:22 AM	JOPPA	XPW02	750.3	17	5369.9	6342.8	3.48	6425.7	4123	186.2	1.5	1.5
5/3/2023	11:15:22 AM	JOPPA	XPW02	750.3	17	5375	6344.1	3.48	6426.7	4124	186	1.4	1.4
5/3/2023	11:33:51 AM	JOPPA	XPW03	750.2	16.7	721.4	856.3	0.42	867.7	557	1386.3	-0.9	-0.9
5/3/2023	11:36:51 AM	JOPPA	XPW03	750.2	16.8	725.3	859.7	0.42	871.1	559	1378.7	-0.9	-0.9
5/3/2023	11:39:51 AM	JOPPA	XPW03	750.3	16.9	729.9	864.4	0.43	875.9	562	1370	-0.9	-0.9
5/3/2023	12:03:30 PM	JOPPA	G54D	750.9	16.4	894.2	1069	0.53	1083.6	695	1118.4	-0.7	-0.7
5/3/2023	12:06:29 PM	JOPPA	G54D	750.8	16.4	863.2	1032.6	0.51	1046.8	671	1158.5	-0.7	-0.7
5/3/2023	12:09:29 PM	JOPPA	G54D	750.7	16.4	859.4	1027.6	0.51	1041.7	668	1163.7	-0.7	-0.7
5/3/2023	12:12:29 PM	JOPPA	G54D	750.8	16.4	858	1027.1	0.51	1041.2	668	1165.4	-0.7	-0.7
5/3/2023	12:15:29 PM	JOPPA	G54D	750.8	16.4	858.3	1027.8	0.51	1042	668	1165.1	-0.7	-0.7



FILE CREATEI 5/8/2023 18:30

DATE	TIME	SITE	DATA ID	Barometer	Temp (°C)	Cond (µS/c	Sp Cond (µ	Sal (psu)	nLFC	Cond (µ	TDS (mg/L)	Resistivity (Sigma-T (s	Sigma (s)
5/3/2023	12:18:29 PM	JOPPA	G54D	750.7	16.4	859.9	1029.6	0.51	1043.7	669	1162.9	-0.7	-0.7
5/3/2023	1:04:48 PM	JOPPA	G09	750.6	16.8	787	932.2	0.46	944.5	606	1270.7	-0.8	-0.8
5/3/2023	1:07:48 PM	JOPPA	G09	750.6	16.9	790.7	936.1	0.46	948.4	608	1264.7	-0.8	-0.8
5/3/2023	1:10:48 PM	JOPPA	G09	750.6	16.8	794	940.7	0.47	953.2	611	1259.5	-0.8	-0.8
5/3/2023	1:13:48 PM	JOPPA	G09	750.5	16.9	798.9	945.7	0.47	958.2	615	1251.8	-0.8	-0.8
5/3/2023	1:59:15 PM	JOPPA	G52D	750.4	15.6	471.9	574.9	0.28	583.2	374	2119.3	-0.8	-0.8
5/3/2023	2:02:15 PM	JOPPA	G52D	750.3	16	476.4	575.1	0.28	583.3	374	2099.1	-0.8	-0.8
5/3/2023	2:05:15 PM	JOPPA	G52D	750.3	16.3	479.4	574.6	0.28	582.6	374	2085.9	-0.9	-0.9
5/3/2023	2:08:15 PM	JOPPA	G52D	750.3	16.7	482	572.5	0.28	580.2	372	2074.9	-1	-1
5/3/2023	3:00:08 PM	JOPPA	G10	750	16.6	1189.1	1415.2	0.71	1434.2	920	841	-0.6	-0.6
5/3/2023	3:03:08 PM	JOPPA	G10	749.9	16.9	1216.7	1438.4	0.73	1457.3	935	821.9	-0.6	-0.6
5/3/2023	3:06:08 PM	JOPPA	G10	749.9	17.1	1252.7	1476.3	0.75	1495.5	960	798.2	-0.7	-0.7
5/3/2023	3:09:08 PM	JOPPA	G10	749.9	17.1	1249.5	1471	0.74	1490	956	800.3	-0.7	-0.7
5/3/2023	3:12:08 PM	JOPPA	G10	750	17.1	1233.8	1451.5	0.73	1470.2	943	810.5	-0.7	-0.7
5/3/2023	3:33:56 PM	JOPPA	G08	750	17.9	958.3	1109.8	0.55	1123.1	721	1043.5	-1	-1
5/3/2023	3:36:56 PM	JOPPA	G08	749.9	17.3	949.7	1112.4	0.55	1126.4	723	1052.9	-0.9	-0.9
5/3/2023	3:39:56 PM	JOPPA	G08	750	17.4	955.6	1118	0.56	1132	727	1046.5	-0.9	-0.9
5/3/2023	3:42:56 PM	JOPPA	G08	749.9	17.4	993.2	1162.1	0.58	1176.6	755	1006.9	-0.8	-0.8
5/3/2023	3:45:56 PM	JOPPA	G08	750	17.3	1051.6	1232.4	0.62	1248	801	950.9	-0.8	-0.8
5/3/2023	4:06:07 PM	JOPPA	G53D	749.6	16.8	546.5	647.8	0.32	656.4	421	1829.8	-0.9	-0.9
5/3/2023	4:09:07 PM	JOPPA	G53D	749.4	16.8	546.9	648.5	0.32	657.1	422	1828.4	-0.9	-0.9
5/3/2023	4:12:07 PM	JOPPA	G53D	749.4	16.7	546	648.3	0.32	656.9	421	1831.6	-0.9	-0.9
5/3/2023	4:15:07 PM	JOPPA	G53D	749.5	16.7	545.3	647.8	0.32	656.5	421	1834	-0.9	-0.9
5/3/2023	4:18:07 PM	JOPPA	G53D	749.4	16.7	542	644.8	0.32	653.4	419	1844.9	-0.9	-0.9
5/3/2023	4:52:02 PM	JOPPA	G05	749.4	16.7	625.7	743.9	0.37	753.9	484	1598.3	-0.9	-0.9
5/3/2023	4:55:02 PM	JOPPA	G05	749.4	16.8	631.6	748.9	0.37	758.8	487	1583.3	-0.9	-0.9
5/3/2023	4:58:02 PM	JOPPA	G05	749.4	17.2	640.7	752.1	0.37	761.6	489	1560.7	-1	-1
5/3/2023	5:01:02 PM	JOPPA	G05	749.4	17.1	639.7	753.8	0.37	763.5	490	1563.3	-0.9	-0.9
5/3/2023	5:26:00 PM	JOPPA	G06	749.5	15.8	802.8	973.9	0.48	987.9	633	1245.7	-0.6	-0.6
5/3/2023	5:29:00 PM	JOPPA	G06	749.6	15.8	825.7	1002.6	0.5	1017.1	652	1211.1	-0.6	-0.6
5/3/2023	5:32:00 PM	JOPPA	G06	749.4	15.7	832	1010.8	0.5	1025.4	657	1201.9	-0.6	-0.6
5/3/2023	5:35:00 PM	JOPPA	G06	749.4	15.7	828.1	1008	0.5	1022.6	655	1207.6	-0.6	-0.6
5/3/2023	6:00:53 PM	JOPPA	G07	749.5	15.7	872.3	1059.9	0.53	1075.3	689	1146.4	-0.6	-0.6
5/3/2023	6:03:53 PM	JOPPA	G07	749.5	15.7	866.7	1054.9	0.53	1070.3	686	1153.8	-0.6	-0.6

FILE CREATEI 5/8/2023 18:30

DATE	TIME	SITE	DATA ID	Barometer Temp (°C)	Cond (µS/c	Sp Cond (µ	Sal (psu)	nLFCond (µ	TDS (mg/L)	Resistivity (	Sigma-T (s	Sigma (s)	
5/3/2023	6:06:53 PM	JOPPA	G07	749.6	15.6	864.3	1053.7	0.52	1069	685	1157	-0.6	-0.6
5/3/2023	6:09:53 PM	JOPPA	G07	749.6	15.6	861.9	1051.2	0.52	1066.6	683	1160.3	-0.6	-0.6
5/3/2023	6:12:53 PM	JOPPA	G07	749.6	15.6	863.4	1053.4	0.52	1068.9	685	1158.2	-0.6	-0.6

FILE CREATEI 5/8/2023 18:30

DATE	TIME	SITE	DATA ID	TSS (mg/L)	Turbidity (NTU)	DO (% Sat)	DO (mg/L)	pH	ORP (mV)	
5/2/2023	9:14:08 AM	JOPPA	G01	0	8.53	9.2	0.92	6.6	5.2	127.7
5/2/2023	9:17:07 AM	JOPPA	G01	0	10.9	8.8	0.88	6.45	14.2	135.8
5/2/2023	9:20:07 AM	JOPPA	G01	0	12.16	8.7	0.87	6.39	17.8	140.4
5/2/2023	9:23:07 AM	JOPPA	G01	0	15.66	8.7	0.86	6.36	19.4	143.1
5/2/2023	9:26:07 AM	JOPPA	G01	0	23.45	8.5	0.85	6.34	20.7	144.9
5/3/2023	7:59:03 AM	JOPPA	G03	0	153.81	38.1	3.82	6.06	36.8	235.6
5/3/2023	8:02:03 AM	JOPPA	G03	0	147.07	37.9	3.8	6.12	33.1	231.2
5/3/2023	8:05:03 AM	JOPPA	G03	0	131.42	37.8	3.79	6.16	30.9	228.3
5/3/2023	8:08:03 AM	JOPPA	G03	0	125.28	37.8	3.79	6.18	29.4	226.2
5/3/2023	8:46:07 AM	JOPPA	G02	0	1.25	60.9	6.33	6.49	11.6	177.4
5/3/2023	8:49:07 AM	JOPPA	G02	0	1.34	20.2	2.07	6.46	13.6	181.7
5/3/2023	9:22:13 AM	JOPPA	G51D	0	21.63	66.2	6.52	5.81	51.4	198.4
5/3/2023	9:25:13 AM	JOPPA	G51D	0	25.7	23.6	2.31	5.6	63.1	210.2
5/3/2023	9:28:13 AM	JOPPA	G51D	0	31.31	18.3	1.79	5.57	65.4	214.1
5/3/2023	10:01:16 AM	JOPPA	G11	0	2.53	45.9	4.47	5.89	46.4	204.4
5/3/2023	10:04:16 AM	JOPPA	G11	0	4.59	27	2.63	5.81	51.1	207.3
5/3/2023	10:07:16 AM	JOPPA	G11	0	11.44	20.8	2.02	5.81	51.4	207.3
5/3/2023	10:10:16 AM	JOPPA	G11	0	21.38	16.3	1.58	5.82	51	206.6
5/3/2023	10:40:00 AM	JOPPA	XPW01	0	6.02	12.3	1.2	7.99	-75.2	64.8
5/3/2023	10:43:00 AM	JOPPA	XPW01	0	5.66	10.6	1.02	8.18	-85.9	38.1
5/3/2023	10:46:00 AM	JOPPA	XPW01	0	5.46	9.6	0.93	8.3	-93.3	9.5
5/3/2023	10:49:00 AM	JOPPA	XPW01	0	3.47	9	0.87	8.38	-97.5	-15.9
5/3/2023	10:52:00 AM	JOPPA	XPW01	0	5.18	8.7	0.84	8.41	-99.5	-33.7
5/3/2023	11:09:22 AM	JOPPA	XPW02	0	3.08	11.5	1.09	7.66	-55.7	50.1
5/3/2023	11:12:22 AM	JOPPA	XPW02	0	3.55	9.1	0.86	7.7	-58.1	-27.2
5/3/2023	11:15:22 AM	JOPPA	XPW02	0	2.86	8.4	0.8	7.72	-59.2	-67.4
5/3/2023	11:33:51 AM	JOPPA	XPW03	0	1.1	18.6	1.8	10.63	-228.3	-31.6
5/3/2023	11:36:51 AM	JOPPA	XPW03	0	0.47	14.1	1.36	10.66	-230.1	-38.5
5/3/2023	11:39:51 AM	JOPPA	XPW03	0	0.14	12.7	1.23	10.67	-230.4	-42.1
5/3/2023	12:03:30 PM	JOPPA	G54D	0	35.88	18	1.75	7.25	-32.3	83.2
5/3/2023	12:06:29 PM	JOPPA	G54D	0	15.87	17.2	1.68	7.09	-22.7	65.1
5/3/2023	12:09:29 PM	JOPPA	G54D	0	14.78	16.9	1.65	6.97	-16.1	51.9
5/3/2023	12:12:29 PM	JOPPA	G54D	0	6.06	17.2	1.68	6.89	-11.5	44.7
5/3/2023	12:15:29 PM	JOPPA	G54D	0	4.51	17.2	1.68	6.84	-8.3	41.7

FILE CREATEI 5/8/2023 18:30

DATE	TIME	SITE	DATA ID	TSS (mg/L)	Turbidity (NTU)	DO (% Sat)	DO (mg/L)	pH	ORP (mV)	
5/3/2023	12:18:29 PM	JOPPA	G54D	0	4.11	17.2	1.68	6.8	-6	41.7
5/3/2023	1:04:48 PM	JOPPA	G09	0	72.76	9.6	0.93	6.44	15.1	11.1
5/3/2023	1:07:48 PM	JOPPA	G09	0	66.74	9.4	0.91	6.41	16.6	11.3
5/3/2023	1:10:48 PM	JOPPA	G09	0	65.06	9.2	0.89	6.39	17.9	12.2
5/3/2023	1:13:48 PM	JOPPA	G09	0	57.57	9.1	0.88	6.37	19	12.9
5/3/2023	1:59:15 PM	JOPPA	G52D	0	1.65	34.4	3.42	6.51	10.8	112.1
5/3/2023	2:02:15 PM	JOPPA	G52D	0	1.23	16.5	1.62	6.36	19.5	92.3
5/3/2023	2:05:15 PM	JOPPA	G52D	0	0.98	14.3	1.4	6.32	21.8	77.6
5/3/2023	2:08:15 PM	JOPPA	G52D	0	0.58	13.9	1.35	6.31	22.4	68.1
5/3/2023	3:00:08 PM	JOPPA	G10	0	3.87	85.6	8.3	6.95	-14.9	146.5
5/3/2023	3:03:08 PM	JOPPA	G10	0	34.72	50.9	4.9	6.78	-4.9	142.9
5/3/2023	3:06:08 PM	JOPPA	G10	0	28.42	38.5	3.7	6.64	3.3	142.8
5/3/2023	3:09:08 PM	JOPPA	G10	0	47	32	3.07	6.61	5.2	139.1
5/3/2023	3:12:08 PM	JOPPA	G10	0	59.43	28	2.68	6.6	5.8	135
5/3/2023	3:33:56 PM	JOPPA	G08	0	3.64	97.9	9.26	7.27	-33.5	132.7
5/3/2023	3:36:56 PM	JOPPA	G08	0	3.24	65.5	6.26	7.04	-20.3	138
5/3/2023	3:39:56 PM	JOPPA	G08	0	4.69	40.1	3.83	6.92	-13.1	138.7
5/3/2023	3:42:56 PM	JOPPA	G08	0	17.77	36.4	3.48	6.87	-10.2	136.8
5/3/2023	3:45:56 PM	JOPPA	G08	0	36.5	35.4	3.38	6.88	-10.7	129.9
5/3/2023	4:06:07 PM	JOPPA	G53D	0	2.18	37.9	3.67	6.94	-14	130.9
5/3/2023	4:09:07 PM	JOPPA	G53D	0	2.12	12	1.17	6.62	4.4	137.3
5/3/2023	4:12:07 PM	JOPPA	G53D	0	1.46	9.7	0.94	6.54	9.2	138.5
5/3/2023	4:15:07 PM	JOPPA	G53D	0	0.64	9.1	0.88	6.5	11.2	137.9
5/3/2023	4:18:07 PM	JOPPA	G53D	0	0.34	8.6	0.84	6.48	12.4	136.7
5/3/2023	4:52:02 PM	JOPPA	G05	0	1.03	62.7	6.09	6.7	-0.4	131.7
5/3/2023	4:55:02 PM	JOPPA	G05	0	5.61	42.2	4.09	6.56	7.9	133.6
5/3/2023	4:58:02 PM	JOPPA	G05	0	7.87	31.3	3	6.51	11	131.3
5/3/2023	5:01:02 PM	JOPPA	G05	0	7.04	24.8	2.39	6.49	11.8	127.9
5/3/2023	5:26:00 PM	JOPPA	G06	0	9.62	36.3	3.59	6.52	10.3	144.4
5/3/2023	5:29:00 PM	JOPPA	G06	0	36.89	25.4	2.51	6.59	6.3	143.8
5/3/2023	5:32:00 PM	JOPPA	G06	0	56.94	19.6	1.94	6.61	4.7	142.4
5/3/2023	5:35:00 PM	JOPPA	G06	0	53.82	16.4	1.63	6.63	3.8	140.9
5/3/2023	6:00:53 PM	JOPPA	G07	0	61.38	18.7	1.85	6.46	13.3	162.2
5/3/2023	6:03:53 PM	JOPPA	G07	0	139.15	13.6	1.35	6.41	16.3	163

FILE CREATEI 5/8/2023 18:30

DATE	TIME	SITE	DATA ID	TSS (mg/L)	Turbidity (NTU)	ODO (% Sat)	ODO (mg/L)	pH	pH (mV)	ORP (mV)
5/3/2023	6:06:53 PM	JOPPA	G07	0	193.45	12.3	1.23	6.39	17.5	162.8
5/3/2023	6:09:53 PM	JOPPA	G07	0	191	11.8	1.17	6.38	18.2	162.2
5/3/2023	6:12:53 PM	JOPPA	G07	0	173.86	11.4	1.13	6.38	18.4	161.4

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536
Technician	J. Riley/ J. Colp

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

Well ID	Date	Time	Time (adj)	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)
G01	5/2/2023	9:26	0926	15.5	59.9	6.34	682.1	682.1	0.85
G02	5/3/2023	8:49	0849	14.3	57.74	6.46	493.9	493.9	2.07
G03	5/3/2023	8:08	0808	15.3	59.54	6.18	674.4	674.4	3.79
G05	5/3/2023	17:01	1701	17.1	62.78	6.49	753.8	753.8	2.39
G06	5/3/2023	17:35	1735	15.7	60.26	6.63	1008	1008	1.63
G07	5/3/2023	18:12	1812	15.6	60.08	6.38	1053.4	1053.4	1.13
G08	5/3/2023	15:45	1545	17.3	63.14	6.88	1232.4	1232.4	3.38
G09	5/3/2023	13:13	1313	16.9	62.42	6.37	945.7	945.7	0.88
G10	5/3/2023	15:12	1512	17.1	62.78	6.6	1451.5	1451.5	2.68
G11	5/3/2023	10:10	1010	16.5	61.7	5.82	1523.2	1523.2	1.58
G51D	5/3/2023	9:28	0928	16.3	61.34	5.57	514.4	514.4	1.79
G52D	5/3/2023	14:08	1408	16.7	62.06	6.31	572.5	572.5	1.35
G53D	5/3/2023	16:18	1618	16.7	62.06	6.48	644.8	644.8	0.84
G54D	5/3/2023	12:18	1218	16.4	61.52	6.8	1029.6	1029.6	1.68
XPW01	5/3/2023	10:52	1052	16.7	62.06	8.41	1220.5	1220.5	0.84
XPW02	5/3/2023	11:15	1115	17	62.6	7.72	6344.1	6344.1	0.8
XPW03	5/3/2023	11:39	1139	16.9	62.42	10.67	864.4	864.4	1.23
XSG01	05/15/2023	10:33	1033						

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536
Technician	J. Riley/ J. Colp

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

Well ID	Date	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	DTB (ft)	DTW (ft)	MP Elev (ft)	GW Elev (ft)	LIMS ID
G01	5/2/2023	23.45	144.9			40.56			23041536-001A
G02	5/3/2023	1.34	181.7			40.94			23041536-002A
G03	5/3/2023	125.28	226.2			35.97			23041536-003A
G05	5/3/2023	7.04	127.9			40.85			23041536-004A
G06	5/3/2023	53.82	140.9			37.95			23041536-005A
G07	5/3/2023	173.86	161.4			38.15			23041536-006A
G08	5/3/2023	36.5	129.9			29.73			23041536-007A
G09	5/3/2023	57.57	12.9			39.04			23041536-008A
G10	5/3/2023	59.43	135			39.3			23041536-009A
G11	5/3/2023	21.38	206.6			45.1			23041536-010A
G51D	5/3/2023	31.31	214.1			41.82			23041536-011A
G52D	5/3/2023	0.58	68.1			27.12			23041536-012A
G53D	5/3/2023	0.34	136.7			35.75			23041536-013A
G54D	5/3/2023	4.11	41.7			41.25			23041536-014A
XPW01	5/3/2023	5.18	-33.7			13.93			23041536-015A
XPW02	5/3/2023	2.86	-67.4			3.45			23041536-016A
XPW03	5/3/2023	0.14	-42.1			10.03			23041536-017A
XSG01	05/15/2023					2.39			23041536-018A

Site Sampling Event	JOP_Q2_2023	
LIMS Workorder	23041536	
Technician	J. Riley/ J. Colp	
Well ID	Date	Ferrous Iron
G01	5/2/2023	1.117
G02	5/3/2023	0.914
G03	5/3/2023	0.712
G05	5/3/2023	0.791
G06	5/3/2023	0.421
G07	5/3/2023	0.19
G08	5/3/2023	0.81
G09	5/3/2023	3.501
G10	5/3/2023	0.441
G11	5/3/2023	0.612
G51D	5/3/2023	0.726
G52D	5/3/2023	0.352
G53D	5/3/2023	0.819
G54D	5/3/2023	0.335
XPW01	5/3/2023	2.91
XPW02	5/3/2023	0.912
XPW03	5/3/2023	1.202
XSG01	05/15/2023	

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



Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-001A
Technician	J. Riley/ J. Colp

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

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)
G01	5/2/2023	9:14	0914	40.56		15.4	59.72	6.6	697.6	697.6
G01	5/2/2023	9:17	0917	40.56		15.5	59.9	6.45	702.8	702.8
G01	5/2/2023	9:20	0920	40.56		15.5	59.9	6.39	723	723
G01	5/2/2023	9:23	0923	40.56		15.3	59.54	6.36	690.7	690.7
G01	5/2/2023	9:26	0926	40.56		15.5	59.9	6.34	682.1	682.1

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-001A
Technician	J. Riley/ J. Colp
Well ID	Date
G01	5/2/2023
G01	5/2/2023
G01	5/2/2023
G01	5/2/2023
G01	5/2/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
0.92	8.53	127.7	
0.88	10.9	135.8	
0.87	12.16	140.4	
0.86	15.66	143.1	
0.85	23.45	144.9	

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-002A
Technician	J. Riley/ J. Colp

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

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)
G02	5/3/2023	8:46	0846	40.94		13.6	56.48	6.49	497.5	497.5
G02	5/3/2023	8:49	0849	40.94		14.3	57.74	6.46	493.9	493.9

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-002A
Technician	J. Riley/ J. Colp
Well ID	Date
G02	5/3/2023
G02	5/3/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
6.33	1.25	177.4	
2.07	1.34	181.7	

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-003A
Technician	J. Riley/ J. Colp

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

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)
G03	5/3/2023	7:59	0759	35.97		15.2	59.36	6.06	705.8	705.8
G03	5/3/2023	8:02	0802	35.97		15.2	59.36	6.12	691.4	691.4
G03	5/3/2023	8:05	0805	35.97		15.2	59.36	6.16	681.1	681.1
G03	5/3/2023	8:08	0808	35.97		15.3	59.54	6.18	674.4	674.4

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-003A
Technician	J. Riley/ J. Colp
Well ID	Date
G03	5/3/2023
G03	5/3/2023
G03	5/3/2023
G03	5/3/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
3.82	153.81	235.6	
3.8	147.07	231.2	
3.79	131.42	228.3	
3.79	125.28	226.2	

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-004A
Technician	J. Riley/ J. Colp

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

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)
G05	5/3/2023	16:52	1652	40.85		16.7	62.06	6.7	743.9	743.9
G05	5/3/2023	16:55	1655	40.85		16.8	62.24	6.56	748.9	748.9
G05	5/3/2023	16:58	1658	40.85		17.2	62.96	6.51	752.1	752.1
G05	5/3/2023	17:01	1701	40.85		17.1	62.78	6.49	753.8	753.8

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-004A
Technician	J. Riley/ J. Colp
Well ID	Date
G05	5/3/2023
G05	5/3/2023
G05	5/3/2023
G05	5/3/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
6.09	1.03	131.7	
4.09	5.61	133.6	
3	7.87	131.3	
2.39	7.04	127.9	



Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-005A
Technician	J. Riley/ J. Colp

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

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)
G06	5/3/2023	17:26	1726	37.95		15.8	60.44	6.52	973.9	973.9
G06	5/3/2023	17:29	1729	37.95		15.8	60.44	6.59	1002.6	1002.6
G06	5/3/2023	17:32	1732	37.95		15.7	60.26	6.61	1010.8	1010.8
G06	5/3/2023	17:35	1735	37.95		15.7	60.26	6.63	1008	1008

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-005A
Technician	J. Riley/ J. Colp
Well ID	Date
G06	5/3/2023
G06	5/3/2023
G06	5/3/2023
G06	5/3/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
3.59	9.62	144.4	
2.51	36.89	143.8	
1.94	56.94	142.4	
1.63	53.82	140.9	

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-006A
Technician	J. Riley/ J. Colp

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

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)
G07	5/3/2023	18:00	1800	38.15		15.7	60.26	6.46	1059.9	1059.9
G07	5/3/2023	18:03	1803	38.15		15.7	60.26	6.41	1054.9	1054.9
G07	5/3/2023	18:06	1806	38.15		15.6	60.08	6.39	1053.7	1053.7
G07	5/3/2023	18:09	1809	38.15		15.6	60.08	6.38	1051.2	1051.2
G07	5/3/2023	18:12	1812	38.15		15.6	60.08	6.38	1053.4	1053.4

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-006A
Technician	J. Riley/ J. Colp
Well ID	Date
G07	5/3/2023
G07	5/3/2023
G07	5/3/2023
G07	5/3/2023
G07	5/3/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
1.85	61.38	162.2	
1.35	139.15	163	
1.23	193.45	162.8	
1.17	191	162.2	
1.13	173.86	161.4	

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-007A
Technician	J. Riley/ J. Colp

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

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)
G08	5/3/2023	15:33	1533	29.73		17.9	64.22	7.27	1109.8	1109.8
G08	5/3/2023	15:36	1536	29.73		17.3	63.14	7.04	1112.4	1112.4
G08	5/3/2023	15:39	1539	29.73		17.4	63.32	6.92	1118	1118
G08	5/3/2023	15:42	1542	29.73		17.4	63.32	6.87	1162.1	1162.1
G08	5/3/2023	15:45	1545	29.73		17.3	63.14	6.88	1232.4	1232.4

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-007A
Technician	J. Riley/ J. Colp
Well ID	Date
G08	5/3/2023
G08	5/3/2023
G08	5/3/2023
G08	5/3/2023
G08	5/3/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
9.26	3.64	132.7	
6.26	3.24	138	
3.83	4.69	138.7	
3.48	17.77	136.8	
3.38	36.5	129.9	

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-008A
Technician	J. Riley/ J. Colp

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

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)
G09	5/3/2023	13:04	1304	39.04		16.8	62.24	6.44	932.2	932.2
G09	5/3/2023	13:07	1307	39.04		16.9	62.42	6.41	936.1	936.1
G09	5/3/2023	13:10	1310	39.04		16.8	62.24	6.39	940.7	940.7
G09	5/3/2023	13:13	1313	39.04		16.9	62.42	6.37	945.7	945.7

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-008A
Technician	J. Riley/ J. Colp
Well ID	Date
G09	5/3/2023
G09	5/3/2023
G09	5/3/2023
G09	5/3/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
0.93	72.76	11.1	
0.91	66.74	11.3	
0.89	65.06	12.2	
0.88	57.57	12.9	



Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-009A
Technician	J. Riley/ J. Colp

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

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)
G10	5/3/2023	15:00	1500	39.3		16.6	61.88	6.95	1415.2	1415.2
G10	5/3/2023	15:03	1503	39.3		16.9	62.42	6.78	1438.4	1438.4
G10	5/3/2023	15:06	1506	39.3		17.1	62.78	6.64	1476.3	1476.3
G10	5/3/2023	15:09	1509	39.3		17.1	62.78	6.61	1471	1471
G10	5/3/2023	15:12	1512	39.3		17.1	62.78	6.6	1451.5	1451.5

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-009A
Technician	J. Riley/ J. Colp
Well ID	Date
G10	5/3/2023
G10	5/3/2023
G10	5/3/2023
G10	5/3/2023
G10	5/3/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
8.3	3.87	146.5	
4.9	34.72	142.9	
3.7	28.42	142.8	
3.07	47	139.1	
2.68	59.43	135	

Site Sampling Event	JOP_Q2_2023									
LIMS Workorder	23041536-010A									
Technician	J. Riley/ J. Colp									
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)
G11	5/3/2023	10:01	1001	45.1		16.4	61.52	5.89	1381.4	1381.4
G11	5/3/2023	10:04	1004	45.1		16.5	61.7	5.81	1534.6	1534.6
G11	5/3/2023	10:07	1007	45.1		16.5	61.7	5.81	1549.1	1549.1
G11	5/3/2023	10:10	1010	45.1		16.5	61.7	5.82	1523.2	1523.2

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

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-010A
Technician	J. Riley/ J. Colp
Well ID	Date
G11	5/3/2023
G11	5/3/2023
G11	5/3/2023
G11	5/3/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
4.47	2.53	204.4	
2.63	4.59	207.3	
2.02	11.44	207.3	
1.58	21.38	206.6	

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-011A
Technician	J. Riley/ J. Colp

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

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)
G51D	5/3/2023	9:22	0922	41.82		16.1	60.98	5.81	516.2	516.2
G51D	5/3/2023	9:25	0925	41.82		16.2	61.16	5.6	510.6	510.6
G51D	5/3/2023	9:28	0928	41.82		16.3	61.34	5.57	514.4	514.4

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-011A
Technician	J. Riley/ J. Colp
Well ID	Date
G51D	5/3/2023
G51D	5/3/2023
G51D	5/3/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
6.52	21.63	198.4	
2.31	25.7	210.2	
1.79	31.31	214.1	

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-012A
Technician	J. Riley/ J. Colp

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

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)
G52D	5/3/2023	13:59	1359	27.12		15.6	60.08	6.51	574.9	574.9
G52D	5/3/2023	14:02	1402	27.12		16	60.8	6.36	575.1	575.1
G52D	5/3/2023	14:05	1405	27.12		16.3	61.34	6.32	574.6	574.6
G52D	5/3/2023	14:08	1408	27.12		16.7	62.06	6.31	572.5	572.5

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-012A
Technician	J. Riley/ J. Colp
Well ID	Date
G52D	5/3/2023
G52D	5/3/2023
G52D	5/3/2023
G52D	5/3/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
3.42	1.65	112.1	
1.62	1.23	92.3	
1.4	0.98	77.6	
1.35	0.58	68.1	



Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-013A
Technician	J. Riley/ J. Colp

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

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)
G53D	5/3/2023	16:06	1606	35.75		16.8	62.24	6.94	647.8	647.8
G53D	5/3/2023	16:09	1609	35.75		16.8	62.24	6.62	648.5	648.5
G53D	5/3/2023	16:12	1612	35.75		16.7	62.06	6.54	648.3	648.3
G53D	5/3/2023	16:15	1615	35.75		16.7	62.06	6.5	647.8	647.8
G53D	5/3/2023	16:18	1618	35.75		16.7	62.06	6.48	644.8	644.8

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-013A
Technician	J. Riley/ J. Colp
Well ID	Date
G53D	5/3/2023
G53D	5/3/2023
G53D	5/3/2023
G53D	5/3/2023
G53D	5/3/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
3.67	2.18	130.9	
1.17	2.12	137.3	
0.94	1.46	138.5	
0.88	0.64	137.9	
0.84	0.34	136.7	

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-014A
Technician	J. Riley/ J. Colp

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

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)
G54D	5/3/2023	12:03	1203	41.25		16.4	61.52	7.25	1069	1069
G54D	5/3/2023	12:06	1206	41.25		16.4	61.52	7.09	1032.6	1032.6
G54D	5/3/2023	12:09	1209	41.25		16.4	61.52	6.97	1027.6	1027.6
G54D	5/3/2023	12:12	1212	41.25		16.4	61.52	6.89	1027.1	1027.1
G54D	5/3/2023	12:15	1215	41.25		16.4	61.52	6.84	1027.8	1027.8
G54D	5/3/2023	12:18	1218	41.25		16.4	61.52	6.8	1029.6	1029.6

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-014A
Technician	J. Riley/ J. Colp
Well ID	Date
G54D	5/3/2023
G54D	5/3/2023
G54D	5/3/2023
G54D	5/3/2023
G54D	5/3/2023
G54D	5/3/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
1.75	35.88	83.2	
1.68	15.87	65.1	
1.65	14.78	51.9	
1.68	6.06	44.7	
1.68	4.51	41.7	
1.68	4.11	41.7	

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-015A
Technician	J. Riley/ J. Colp

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

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)
XPW01	5/3/2023	10:40	1040	13.93		16.4	61.52	7.99	1197.1	1197.1
XPW01	5/3/2023	10:43	1043	13.93		16.6	61.88	8.18	1198.8	1198.8
XPW01	5/3/2023	10:46	1046	13.93		16.7	62.06	8.3	1209.9	1209.9
XPW01	5/3/2023	10:49	1049	13.93		16.7	62.06	8.38	1218.1	1218.1
XPW01	5/3/2023	10:52	1052	13.93		16.7	62.06	8.41	1220.5	1220.5

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-015A
Technician	J. Riley/ J. Colp
Well ID	Date
XPW01	5/3/2023
XPW01	5/3/2023
XPW01	5/3/2023
XPW01	5/3/2023
XPW01	5/3/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
1.2	6.02	64.8	
1.02	5.66	38.1	
0.93	5.46	9.5	
0.87	3.47	-15.9	
0.84	5.18	-33.7	

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-016A
Technician	J. Riley/ J. Colp

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

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)
XPW02	5/3/2023	11:09	1109	3.45		16.9	62.42	7.66	6340.7	6340.7
XPW02	5/3/2023	11:12	1112	3.45		17	62.6	7.7	6342.8	6342.8
XPW02	5/3/2023	11:15	1115	3.45		17	62.6	7.72	6344.1	6344.1

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-016A
Technician	J. Riley/ J. Colp
Well ID	Date
XPW02	5/3/2023
XPW02	5/3/2023
XPW02	5/3/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
1.09	3.08	50.1	
0.86	3.55	-27.2	
0.8	2.86	-67.4	



Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-017A
Technician	J. Riley/ J. Colp

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

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)
XPW03	5/3/2023	11:33	1133	10.03		16.7	62.06	10.63	856.3	856.3
XPW03	5/3/2023	11:36	1136	10.03		16.8	62.24	10.66	859.7	859.7
XPW03	5/3/2023	11:39	1139	10.03		16.9	62.42	10.67	864.4	864.4

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-017A
Technician	J. Riley/ J. Colp
Well ID	Date
XPW03	5/3/2023
XPW03	5/3/2023
XPW03	5/3/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
1.8	1.1	-31.6	
1.36	0.47	-38.5	
1.23	0.14	-42.1	

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-018A
Technician	J. Colp
Well ID	Date
XSG01	05/15/2023

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

Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)
1033	1033	2.39						

Site Sampling Event	JOP_Q2_2023
LIMS Workorder	23041536-018A
Technician	J. Colp
Well ID	Date
XSG01	05/15/2023

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

ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)



November 16, 2023

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-23Q3**

**WorkOrder: 23091473**

Dear Eric Bauer:

TEKLAB, INC received 18 samples for JOP\_257\_401 on 9/29/2023 9:30:00 AM 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](mailto:ehurley@teklabinc.com)



## Report Contents

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

**Client:** Ramboll

**Work Order:** 23091473

**Client Project:** JOP-23Q3

**Report Date:** 16-Nov-23

**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
Dates Report	24
Quality Control Results	43
Receiving Check List	96
Chain of Custody	Appended



## Definitions

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### 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:** 23091473

**Client Project:** JOP-23Q3

**Report Date:** 16-Nov-23

### Qualifiers

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



**Case Narrative**

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

**Client:** Ramboll  
**Client Project:** JOP-23Q3

**Work Order:** 23091473  
**Report Date:** 16-Nov-23

**Cooler Receipt Temp:** 5.6 °C

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

XSG01: insufficient water for measurement. SG02: removed per Roger Faughn.

G16S and G151: Ferrous Iron was not measured in the field; per Eric Bauer, proceed with reporting without Ferrous Iron data. EAH 10/17/23

G19S, G10, G101-LF and G12S Duplicate collection dates/times are per the field instrument(s) rather than the chain of custody. EAH 10/18/23

Per Eric Bauer's request, only JOP\_257\_401 data is included in this report. EAH 11/16/23

**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  
**Client Project:** JOP-23Q3

**Work Order:** 23091473  
**Report Date:** 16-Nov-23

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2024	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		1/31/2024	Collinsville
Missouri	MDNR	00930		5/31/2023	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



## Laboratory Results

Client: Ramboll  
Client Project: JOP-23Q3  
Lab ID: 23091473-001  
Matrix: GROUNDWATER

Work Order: 23091473  
Report Date: 16-Nov-23

Client Sample ID: G01D

Collection Date: 09/25/2023 13:07

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		44.16	ft	1	09/25/2023 13:07	R337257
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		9.9	NTU	1	09/25/2023 13:07	R337257
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		30	mV	1	09/25/2023 13:07	R337257
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		533	µS/cm	1	09/25/2023 13:07	R337257
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		18.1	°C	1	09/25/2023 13:07	R337257
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.65	mg/L	1	09/25/2023 13:07	R337257
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.53		1	09/25/2023 13:07	R337257
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		350	mg/L	1	09/28/2023 11:04	R337107
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	6	10		28	mg/L	1	09/27/2023 20:09	R337008
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.21	mg/L	1	09/27/2023 8:41	R336932
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		11	mg/L	1	09/27/2023 20:09	R337023
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		31.1	mg/L	1	09/30/2023 9:34	212544
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/02/2023 18:34	212544
Arsenic	NELAP	0.0004	0.0010	J	0.0007	mg/L	5	10/02/2023 18:34	212544
Barium	NELAP	0.0007	0.0010		0.193	mg/L	5	09/29/2023 21:23	212544
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	09/29/2023 21:23	212544
Boron	NELAP	0.0092	0.025	J	0.015	mg/L	5	09/29/2023 21:23	212544
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	09/29/2023 21:23	212544
Chromium	NELAP	0.0007	0.0015		0.0038	mg/L	5	10/02/2023 18:34	212544
Cobalt	NELAP	0.0001	0.0010	J	0.0008	mg/L	5	09/29/2023 21:23	212544
Lead	NELAP	0.0006	0.0010	J	0.0008	mg/L	5	09/29/2023 21:23	212544
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	09/29/2023 21:23	212544
Molybdenum	*	0.0006	0.0015	J	0.0007	mg/L	5	09/29/2023 21:23	212544
Selenium	NELAP	0.0006	0.0010		0.0016	mg/L	5	10/02/2023 18:34	212544
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	09/29/2023 21:23	212544
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	09/29/2023 16:03	212516



## Laboratory Results

Client: Ramboll  
Client Project: JOP-23Q3  
Lab ID: 23091473-002  
Matrix: GROUNDWATER

Work Order: 23091473  
Report Date: 16-Nov-23

Client Sample ID: G02D

Collection Date: 09/25/2023 14:06

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		44.46	ft	1	09/25/2023 14:06	R337257
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		12	NTU	1	09/25/2023 14:06	R337257
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		68	mV	1	09/25/2023 14:06	R337257
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		412	µS/cm	1	09/25/2023 14:06	R337257
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		16.1	°C	1	09/25/2023 14:06	R337257
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		1.51	mg/L	1	09/25/2023 14:06	R337257
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.40		1	09/25/2023 14:06	R337257
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		226	mg/L	1	09/28/2023 11:05	R337107
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	6	10		15	mg/L	1	09/27/2023 20:15	R337008
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.21	mg/L	1	09/27/2023 8:42	R336932
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		21	mg/L	1	09/27/2023 20:15	R337023
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		33.7	mg/L	1	09/30/2023 9:36	212544
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/02/2023 18:40	212544
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/02/2023 18:40	212544
Barium	NELAP	0.0007	0.0010		0.229	mg/L	5	09/29/2023 21:29	212544
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	09/29/2023 21:29	212544
Boron	NELAP	0.0092	0.0250		0.0401	mg/L	5	09/29/2023 21:29	212544
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	09/29/2023 21:29	212544
Chromium	NELAP	0.0007	0.0015	J	0.0010	mg/L	5	10/02/2023 18:40	212544
Cobalt	NELAP	0.0001	0.0010	J	0.0004	mg/L	5	09/29/2023 21:29	212544
Lead	NELAP	0.0006	0.0010		0.0019	mg/L	5	09/29/2023 21:29	212544
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	09/29/2023 21:29	212544
Molybdenum	*	0.0006	0.0015		< 0.0015	mg/L	5	09/29/2023 21:29	212544
Selenium	NELAP	0.0006	0.0010		0.0012	mg/L	5	10/02/2023 18:40	212544
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	09/29/2023 21:29	212544
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	09/29/2023 16:06	212516



Client: Ramboll  
Client Project: JOP-23Q3  
Lab ID: 23091473-003  
Matrix: GROUNDWATER

Work Order: 23091473  
Report Date: 16-Nov-23

Client Sample ID: G03

Collection Date: 09/26/2023 12:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		39.49	ft	1	09/26/2023 12:35	R337257
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		35	NTU	1	09/26/2023 12:35	R337257
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		40	mV	1	09/26/2023 12:35	R337257
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		445	µS/cm	1	09/26/2023 12:35	R337257
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		17.8	°C	1	09/26/2023 12:35	R337257
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		3.89	mg/L	1	09/26/2023 12:35	R337257
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.43		1	09/26/2023 12:35	R337257
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	40	50		295	mg/L	2.5	09/29/2023 9:50	R337238
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	31	50		67	mg/L	5	09/29/2023 23:09	R337145
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.21	mg/L	1	09/27/2023 8:44	R336932
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		19	mg/L	1	09/27/2023 20:23	R337023
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		41.8	mg/L	1	09/30/2023 9:37	212544
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/02/2023 18:47	212544
Arsenic	NELAP	0.0004	0.0010	J	0.0005	mg/L	5	10/02/2023 18:47	212544
Barium	NELAP	0.0007	0.0010		0.0748	mg/L	5	09/29/2023 21:35	212544
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	09/29/2023 21:35	212544
Boron	NELAP	0.0092	0.0250		0.267	mg/L	5	09/29/2023 21:35	212544
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	09/29/2023 21:35	212544
Chromium	NELAP	0.0007	0.0015		0.0026	mg/L	5	10/02/2023 18:47	212544
Cobalt	NELAP	0.0001	0.0010		0.0014	mg/L	5	09/29/2023 21:35	212544
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	09/29/2023 21:35	212544
Lithium	*	0.0015	0.0030	J	0.0018	mg/L	5	09/29/2023 21:35	212544
Molybdenum	*	0.0006	0.0015		< 0.0015	mg/L	5	09/29/2023 21:35	212544
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/02/2023 18:47	212544
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	09/29/2023 21:35	212544
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	09/29/2023 16:08	212516



## Laboratory Results

Client: Ramboll  
Client Project: JOP-23Q3  
Lab ID: 23091473-004  
Matrix: GROUNDWATER

Work Order: 23091473  
Report Date: 16-Nov-23

Client Sample ID: G05

Collection Date: 09/27/2023 10:14

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		44.47	ft	1	09/27/2023 10:14	R337257
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		20	NTU	1	09/27/2023 10:14	R337257
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		-17	mV	1	09/27/2023 10:14	R337257
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		565	µS/cm	1	09/27/2023 10:14	R337257
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		17.4	°C	1	09/27/2023 10:14	R337257
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.94	mg/L	1	09/27/2023 10:14	R337257
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.42		1	09/27/2023 10:14	R337257
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		360	mg/L	1	10/02/2023 10:28	R337236
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	31	50		82	mg/L	5	10/03/2023 22:53	R337255
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.41	mg/L	1	10/03/2023 11:20	R337213
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		20	mg/L	1	10/03/2023 22:48	R337287
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		52.2	mg/L	1	09/29/2023 21:57	212596
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/02/2023 13:31	212596
Arsenic	NELAP	0.0004	0.0010		0.0012	mg/L	5	10/02/2023 13:31	212596
Barium	NELAP	0.0007	0.0010		0.169	mg/L	5	10/03/2023 9:28	212596
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/02/2023 13:31	212596
Boron	NELAP	0.0092	0.0250		0.0436	mg/L	5	10/03/2023 9:28	212596
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/02/2023 13:31	212596
Chromium	NELAP	0.0007	0.0015		0.0023	mg/L	5	10/03/2023 9:28	212596
Cobalt	NELAP	0.0001	0.0010		0.0023	mg/L	5	10/03/2023 9:28	212596
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/02/2023 13:31	212596
Lithium	*	0.0015	0.0030	J	0.0030	mg/L	5	10/02/2023 13:31	212596
Molybdenum	*	0.0006	0.0015		0.0046	mg/L	5	10/03/2023 9:28	212596
Selenium	NELAP	0.0006	0.0010		0.0011	mg/L	5	10/02/2023 13:31	212596
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/02/2023 13:31	212596
CCV recovered outside the upper control limits for Be and Li. Sample results are below the reporting limit. Data is reportable per the TNI standard.									
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/03/2023 13:26	212711



**Laboratory Results**

Client: Ramboll  
Client Project: JOP-23Q3  
Lab ID: 23091473-005  
Matrix: GROUNDWATER

Work Order: 23091473  
Report Date: 16-Nov-23

Client Sample ID: G06

Collection Date: 09/27/2023 11:16

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		41.49	ft	1	09/27/2023 11:16	R337257
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		43	NTU	1	09/27/2023 11:16	R337257
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		14	mV	1	09/27/2023 11:16	R337257
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		716	µS/cm	1	09/27/2023 11:16	R337257
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		16.2	°C	1	09/27/2023 11:16	R337257
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.88	mg/L	1	09/27/2023 11:16	R337257
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.56		1	09/27/2023 11:16	R337257
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		486	mg/L	1	10/02/2023 10:28	R337236
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		187	mg/L	10	10/03/2023 23:02	R337255
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.27	mg/L	1	10/03/2023 11:21	R337213
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		21	mg/L	1	10/03/2023 22:56	R337287
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		84.9	mg/L	1	09/29/2023 21:59	212596
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/02/2023 13:37	212596
Arsenic	NELAP	0.0004	0.0010	J	0.0010	mg/L	5	10/02/2023 13:37	212596
Barium	NELAP	0.0007	0.0010		0.0251	mg/L	5	10/03/2023 9:33	212596
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/02/2023 13:37	212596
Boron	NELAP	0.0092	0.0250		3.29	mg/L	5	10/02/2023 13:37	212596
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/02/2023 13:37	212596
Chromium	NELAP	0.0007	0.0015		0.0028	mg/L	5	10/03/2023 9:33	212596
Cobalt	NELAP	0.0001	0.0010	J	0.0008	mg/L	5	10/02/2023 13:37	212596
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/02/2023 13:37	212596
Lithium	*	0.0015	0.0030		0.0035	mg/L	5	10/03/2023 9:33	212596
Molybdenum	*	0.0006	0.0015		< 0.0015	mg/L	5	10/02/2023 13:37	212596
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/02/2023 13:37	212596
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/02/2023 13:37	212596
<i>CCV recovered outside the upper control limits for Be. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020	J	0.00012	mg/L	1	10/03/2023 13:28	212711





## Laboratory Results

Client: Ramboll  
Client Project: JOP-23Q3  
Lab ID: 23091473-006  
Matrix: GROUNDWATER

Work Order: 23091473  
Report Date: 16-Nov-23

Client Sample ID: G07

Collection Date: 09/27/2023 11:57

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		41.58	ft	1	09/27/2023 11:57	R337257
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		13	NTU	1	09/27/2023 11:57	R337257
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		31	mV	1	09/27/2023 11:57	R337257
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		847	µS/cm	1	09/27/2023 11:57	R337257
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		16.0	°C	1	09/27/2023 11:57	R337257
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.72	mg/L	1	09/27/2023 11:57	R337257
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.43		1	09/27/2023 11:57	R337257
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		612	mg/L	1	10/02/2023 10:28	R337236
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		268	mg/L	10	10/03/2023 23:18	R337255
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.43	mg/L	1	10/03/2023 11:23	R337213
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		21	mg/L	1	10/03/2023 23:07	R337287
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		97.1	mg/L	1	09/29/2023 22:08	212596
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/02/2023 13:42	212596
Arsenic	NELAP	0.0004	0.0010	J	0.0007	mg/L	5	10/02/2023 13:42	212596
Barium	NELAP	0.0007	0.0010		0.0366	mg/L	5	10/03/2023 9:45	212596
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/02/2023 13:42	212596
Boron	NELAP	0.0092	0.0250		5.80	mg/L	5	10/02/2023 13:42	212596
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/02/2023 13:42	212596
Chromium	NELAP	0.0007	0.0015		0.0027	mg/L	5	10/02/2023 13:42	212596
Cobalt	NELAP	0.0001	0.0010		0.0011	mg/L	5	10/02/2023 13:42	212596
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/02/2023 13:42	212596
Lithium	*	0.0015	0.0030	J	0.0025	mg/L	5	10/03/2023 9:45	212596
Molybdenum	*	0.0006	0.0015	J	0.0007	mg/L	5	10/02/2023 13:42	212596
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/02/2023 13:42	212596
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/02/2023 13:42	212596
CCV recovered outside the upper control limits for Be. Sample results are below the reporting limit. Data is reportable per the TNI standard.									
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020	J	0.00006	mg/L	1	10/03/2023 13:30	212711



## Laboratory Results

Client: Ramboll  
Client Project: JOP-23Q3  
Lab ID: 23091473-007  
Matrix: GROUNDWATER

Work Order: 23091473  
Report Date: 16-Nov-23

Client Sample ID: G08

Collection Date: 09/26/2023 14:32

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		32.69	ft	1	09/26/2023 14:32	R337257
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		40	NTU	1	09/26/2023 14:32	R337257
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		-92	mV	1	09/26/2023 14:32	R337257
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		912	µS/cm	1	09/26/2023 14:32	R337257
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		17.3	°C	1	09/26/2023 14:32	R337257
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.65	mg/L	1	09/26/2023 14:32	R337257
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		7.01		1	09/26/2023 14:32	R337257
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	40	50		680	mg/L	2.5	09/29/2023 9:51	R337238
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		320	mg/L	10	10/03/2023 23:46	R337255
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.31	mg/L	1	10/03/2023 11:25	R337213
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		14	mg/L	1	10/03/2023 23:42	R337287
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		132	mg/L	1	09/29/2023 22:09	212596
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/02/2023 13:48	212596
Arsenic	NELAP	0.0004	0.0010		0.0086	mg/L	5	10/02/2023 13:48	212596
Barium	NELAP	0.0007	0.0010		0.0333	mg/L	5	10/03/2023 9:51	212596
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/02/2023 13:48	212596
Boron	NELAP	0.0092	0.0250		6.30	mg/L	5	10/02/2023 13:48	212596
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/02/2023 13:48	212596
Chromium	NELAP	0.0007	0.0015		0.0020	mg/L	5	10/03/2023 9:51	212596
Cobalt	NELAP	0.0001	0.0010		0.0037	mg/L	5	10/02/2023 13:48	212596
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/02/2023 13:48	212596
Lithium	*	0.0015	0.0030	J	0.0021	mg/L	5	10/03/2023 9:51	212596
Molybdenum	*	0.0006	0.0015		0.0023	mg/L	5	10/02/2023 13:48	212596
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/02/2023 13:48	212596
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/02/2023 13:48	212596
CCV recovered outside the upper control limits for Be. Sample results are below the reporting limit. Data is reportable per the TNI standard.									
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/03/2023 13:37	212711



## Laboratory Results

Client: Ramboll  
Client Project: JOP-23Q3  
Lab ID: 23091473-008  
Matrix: GROUNDWATER

Work Order: 23091473  
Report Date: 16-Nov-23

Client Sample ID: G09

Collection Date: 09/26/2023 14:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		41.48	ft	1	09/26/2023 14:10	R337257
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		17	NTU	1	09/26/2023 14:10	R337257
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		33	mV	1	09/26/2023 14:10	R337257
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		789	µS/cm	1	09/26/2023 14:10	R337257
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		17.7	°C	1	09/26/2023 14:10	R337257
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.81	mg/L	1	09/26/2023 14:10	R337257
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.24		1	09/26/2023 14:10	R337257
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	40	50		500	mg/L	2.5	09/29/2023 10:12	R337238
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		229	mg/L	10	10/03/2023 23:54	R337255
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.31	mg/L	1	10/03/2023 11:26	R337213
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		17	mg/L	1	10/03/2023 23:50	R337287
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		64.8	mg/L	1	09/29/2023 22:16	212596
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/02/2023 13:53	212596
Arsenic	NELAP	0.0004	0.0010		0.0043	mg/L	5	10/02/2023 13:53	212596
Barium	NELAP	0.0007	0.0010		0.0271	mg/L	5	10/03/2023 9:56	212596
Beryllium	NELAP	0.0002	0.0010	J	0.0003	mg/L	5	10/02/2023 13:53	212596
Boron	NELAP	0.0092	0.0250		4.57	mg/L	5	10/02/2023 13:53	212596
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/02/2023 13:53	212596
Chromium	NELAP	0.0007	0.0015		0.0021	mg/L	5	10/03/2023 9:56	212596
Cobalt	NELAP	0.0001	0.0010		0.0050	mg/L	5	10/02/2023 13:53	212596
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/02/2023 13:53	212596
Lithium	*	0.0015	0.0030		0.0032	mg/L	5	10/03/2023 9:56	212596
Molybdenum	*	0.0006	0.0015		< 0.0015	mg/L	5	10/02/2023 13:53	212596
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/02/2023 13:53	212596
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/02/2023 13:53	212596
CCV recovered outside the upper control limits for Be. Sample results are below the reporting limit. Data is reportable per the TNI standard.									
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020	J	0.00006	mg/L	1	10/03/2023 13:39	212711



Client: Ramboll  
Client Project: JOP-23Q3  
Lab ID: 23091473-009  
Matrix: GROUNDWATER

Work Order: 23091473  
Report Date: 16-Nov-23

Client Sample ID: G10

Collection Date: 09/26/2023 13:31

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		41.80	ft	1	09/26/2023 13:31	R337257
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		16	NTU	1	09/26/2023 13:31	R337257
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		65	mV	1	09/26/2023 13:31	R337257
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		1250	µS/cm	1	09/26/2023 13:31	R337257
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		17.5	°C	1	09/26/2023 13:31	R337257
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.47	mg/L	1	09/26/2023 13:31	R337257
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.65		1	09/26/2023 13:31	R337257
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	40	50		705	mg/L	2.5	09/29/2023 10:13	R337238
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		356	mg/L	10	10/04/2023 0:03	R337255
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.37	mg/L	1	10/03/2023 11:28	R337213
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		24	mg/L	1	10/03/2023 23:58	R337287
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		120	mg/L	1	09/29/2023 22:18	212596
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/02/2023 13:59	212596
Arsenic	NELAP	0.0004	0.0010		0.0037	mg/L	5	10/02/2023 13:59	212596
Barium	NELAP	0.0007	0.0010		0.0336	mg/L	5	10/03/2023 11:10	212596
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/02/2023 13:59	212596
Boron	NELAP	0.0092	0.0250		3.41	mg/L	5	10/02/2023 13:59	212596
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/02/2023 13:59	212596
Chromium	NELAP	0.0007	0.0015	J	0.0010	mg/L	5	10/03/2023 11:10	212596
Cobalt	NELAP	0.0001	0.0010		0.0021	mg/L	5	10/03/2023 11:10	212596
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/02/2023 13:59	212596
Lithium	*	0.0015	0.0030		0.0041	mg/L	5	10/03/2023 11:10	212596
Molybdenum	*	0.0006	0.0015		0.0016	mg/L	5	10/03/2023 11:10	212596
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/02/2023 13:59	212596
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/02/2023 13:59	212596
CCV recovered outside the upper control limits for Be. Sample results are below the reporting limit. Data is reportable per the TNI standard.									
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020	J	0.00007	mg/L	1	10/03/2023 13:42	212711



## Laboratory Results

Client: Ramboll  
Client Project: JOP-23Q3  
Lab ID: 23091473-015  
Matrix: GROUNDWATER

Work Order: 23091473  
Report Date: 16-Nov-23

Client Sample ID: G11

Collection Date: 09/26/2023 11:47

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		48.69	ft	1	09/26/2023 11:47	R337257
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		8.9	NTU	1	09/26/2023 11:47	R337257
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		98	mV	1	09/26/2023 11:47	R337257
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		748	µS/cm	1	09/26/2023 11:47	R337257
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		17.8	°C	1	09/26/2023 11:47	R337257
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.76	mg/L	1	09/26/2023 11:47	R337257
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		5.97		1	09/26/2023 11:47	R337257
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		428	mg/L	1	09/29/2023 10:14	R337238
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	63	100		192	mg/L	10	09/29/2023 23:17	R337145
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.16	mg/L	1	09/27/2023 8:46	R336932
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		29	mg/L	1	09/27/2023 20:31	R337023
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		59.9	mg/L	1	09/30/2023 9:39	212544
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/02/2023 19:38	212544
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/02/2023 19:38	212544
Barium	NELAP	0.0007	0.0010		0.0231	mg/L	5	09/29/2023 22:07	212544
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	09/29/2023 22:07	212544
Boron	NELAP	0.0092	0.0250		0.308	mg/L	5	09/29/2023 22:07	212544
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	09/29/2023 22:07	212544
Chromium	NELAP	0.0007	0.0015	J	0.0007	mg/L	5	10/02/2023 19:38	212544
Cobalt	NELAP	0.0001	0.0010	J	0.0006	mg/L	5	09/29/2023 22:07	212544
Lead	NELAP	0.0006	0.0010		0.0027	mg/L	5	09/29/2023 22:07	212544
Lithium	*	0.0015	0.0030		0.0035	mg/L	5	10/02/2023 19:38	212544
Molybdenum	*	0.0006	0.0015	J	0.0007	mg/L	5	09/29/2023 22:07	212544
Selenium	NELAP	0.0006	0.0010		0.0019	mg/L	5	10/02/2023 19:38	212544
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	09/29/2023 22:07	212544
CCV recovered outside the upper control limits for Be. Sample results are below the reporting limit. Data is reportable per the TNI standard.									
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	09/29/2023 16:10	212516



Client: Ramboll  
Client Project: JOP-23Q3  
Lab ID: 23091473-035  
Matrix: GROUNDWATER

Work Order: 23091473  
Report Date: 16-Nov-23

Client Sample ID: G51D

Collection Date: 09/25/2023 15:36

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		45.38	ft	1	09/25/2023 15:36	R337257
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		17	NTU	1	09/25/2023 15:36	R337257
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		139	mV	1	09/25/2023 15:36	R337257
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		426	µS/cm	1	09/25/2023 15:36	R337257
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		18.4	°C	1	09/25/2023 15:36	R337257
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		1.75	mg/L	1	09/25/2023 15:36	R337257
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		5.45		1	09/25/2023 15:36	R337257
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		292	mg/L	1	09/28/2023 11:05	R337107
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100	SR	127	mg/L	10	09/27/2023 21:03	R337008
<i>Matrix spike did not recover within control limits. Results verified by dilution.</i>									
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10	J	0.08	mg/L	1	09/27/2023 8:48	R336932
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4	J	4	mg/L	1	09/27/2023 20:52	R337023
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		28.7	mg/L	1	09/30/2023 9:41	212544
<i>Matrix spike control limits are not applicable due to high sample/spike ratio.</i>									
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/02/2023 18:53	212544
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/02/2023 18:53	212544
Barium	NELAP	0.0007	0.0010		0.0349	mg/L	5	10/02/2023 18:53	212544
Beryllium	NELAP	0.0002	0.0010	S	< 0.0010	mg/L	5	09/29/2023 22:33	212544
Boron	NELAP	0.0165	0.0250	S	0.899	mg/L	5	10/10/2023 12:06	212976
Cadmium	NELAP	0.0002	0.0010	S	< 0.0010	mg/L	5	09/29/2023 22:33	212544
Chromium	NELAP	0.0007	0.0015		0.0017	mg/L	5	10/02/2023 18:53	212544
Cobalt	NELAP	0.0002	0.0010	J	0.0008	mg/L	5	10/02/2023 18:53	212544
Lead	NELAP	0.0006	0.0010	S	< 0.0010	mg/L	5	09/29/2023 22:33	212544
Lithium	*	0.0015	0.0030		0.0058	mg/L	5	10/02/2023 18:53	212544
Molybdenum	*	0.0006	0.0015	S	< 0.0015	mg/L	5	09/29/2023 22:33	212544
Selenium	NELAP	0.0006	0.0010		0.0051	mg/L	5	10/02/2023 18:53	212544
Thallium	NELAP	0.0010	0.0020	S	< 0.0020	mg/L	5	09/29/2023 22:33	212544
<i>Matrix spike for B did not recover within control limits due to sample composition.</i>									
<i>Matrix spike for Fe did not recover within control limits due to sample composition.</i>									
<i>Matrix spike recovered outside upper control limits. Sample results are below the reporting limit. Data is reportable.</i>									
<i>CCV recovered outside the upper control limits for Be. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>									
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	09/29/2023 16:12	212516





## Laboratory Results

Client: Ramboll  
Client Project: JOP-23Q3  
Lab ID: 23091473-036  
Matrix: GROUNDWATER

Work Order: 23091473  
Report Date: 16-Nov-23

Client Sample ID: G52D

Collection Date: 09/26/2023 10:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		28.81	ft	1	09/26/2023 10:30	R337257
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		3.4	NTU	1	09/26/2023 10:30	R337257
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		55	mV	1	09/26/2023 10:30	R337257
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		462	µS/cm	1	09/26/2023 10:30	R337257
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		15.9	°C	1	09/26/2023 10:30	R337257
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.56	mg/L	1	09/26/2023 10:30	R337257
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.34		1	09/26/2023 10:30	R337257
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		282	mg/L	1	09/29/2023 10:32	R337238
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	12	20		52	mg/L	2	09/27/2023 21:56	R337008
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.28	mg/L	1	09/27/2023 8:51	R336932
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		11	mg/L	1	09/27/2023 21:50	R337023
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		44.8	mg/L	1	09/30/2023 9:45	212544
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/02/2023 19:44	212544
Arsenic	NELAP	0.0004	0.0010		0.0015	mg/L	5	10/02/2023 19:44	212544
Barium	NELAP	0.0007	0.0010		0.250	mg/L	5	09/29/2023 22:14	212544
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	09/29/2023 22:14	212544
Boron	NELAP	0.0092	0.025	J	0.013	mg/L	5	09/29/2023 22:14	212544
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	09/29/2023 22:14	212544
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	10/02/2023 19:44	212544
Cobalt	NELAP	0.0001	0.0010		0.0042	mg/L	5	09/29/2023 22:14	212544
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	09/29/2023 22:14	212544
Lithium	*	0.0015	0.0030	J	0.0023	mg/L	5	09/29/2023 22:14	212544
Molybdenum	*	0.0006	0.0015	J	0.0009	mg/L	5	09/29/2023 22:14	212544
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/02/2023 19:44	212544
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	09/29/2023 22:14	212544
CCV recovered outside the upper control limits for Be and Li. Sample results are below the reporting limit. Data is reportable per the TNI standard.									
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	09/29/2023 16:15	212516



## Laboratory Results

Client: Ramboll  
Client Project: JOP-23Q3  
Lab ID: 23091473-037  
Matrix: GROUNDWATER

Work Order: 23091473  
Report Date: 16-Nov-23

Client Sample ID: G53D

Collection Date: 09/27/2023 9:31

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		39.36	ft	1	09/27/2023 9:31	R337257
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		10	NTU	1	09/27/2023 9:31	R337257
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		-23	mV	1	09/27/2023 9:31	R337257
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		489	µS/cm	1	09/27/2023 9:31	R337257
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		17.0	°C	1	09/27/2023 9:31	R337257
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.60	mg/L	1	09/27/2023 9:31	R337257
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.46		1	09/27/2023 9:31	R337257
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		330	mg/L	1	10/02/2023 11:55	R337236
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	31	50		73	mg/L	5	10/04/2023 0:16	R337255
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.76	mg/L	1	10/03/2023 10:32	R337213
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		17	mg/L	1	10/04/2023 0:11	R337287
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		35.9	mg/L	1	10/03/2023 13:28	212717
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/04/2023 16:49	212717
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/04/2023 16:49	212717
Barium	NELAP	0.0007	0.0010		0.0910	mg/L	5	10/04/2023 16:49	212717
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/04/2023 16:49	212717
Boron	NELAP	0.0092	0.0250		0.371	mg/L	5	10/04/2023 16:49	212717
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/04/2023 16:49	212717
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	10/04/2023 16:49	212717
Cobalt	NELAP	0.0001	0.0010		0.0013	mg/L	5	10/04/2023 16:49	212717
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/04/2023 16:49	212717
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	10/04/2023 16:49	212717
Molybdenum	*	0.0006	0.0015		< 0.0015	mg/L	5	10/04/2023 16:49	212717
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/04/2023 16:49	212717
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/04/2023 16:49	212717
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/03/2023 13:01	212712





Client: Ramboll  
Client Project: JOP-23Q3  
Lab ID: 23091473-038  
Matrix: GROUNDWATER

Work Order: 23091473  
Report Date: 16-Nov-23

Client Sample ID: G54D

Collection Date: 09/26/2023 12:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		43.85	ft	1	09/26/2023 12:35	R337257
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		7.8	NTU	1	09/26/2023 12:35	R337257
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		38	mV	1	09/26/2023 12:35	R337257
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		846	µS/cm	1	09/26/2023 12:35	R337257
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		17.2	°C	1	09/26/2023 12:35	R337257
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		3.04	mg/L	1	09/26/2023 12:35	R337257
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.64		1	09/26/2023 12:35	R337257
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		508	mg/L	1	09/29/2023 10:32	R337238
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		180	mg/L	10	09/27/2023 22:20	R337008
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.30	mg/L	1	09/27/2023 8:53	R336932
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		20	mg/L	1	09/27/2023 22:09	R337023
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		81.2	mg/L	1	09/30/2023 9:47	212544
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/02/2023 19:50	212544
Arsenic	NELAP	0.0004	0.0010	J	0.0005	mg/L	5	10/02/2023 19:50	212544
Barium	NELAP	0.0007	0.0010		0.0739	mg/L	5	09/29/2023 22:20	212544
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	09/29/2023 22:20	212544
Boron	NELAP	0.0092	0.0250		0.404	mg/L	5	09/29/2023 22:20	212544
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	09/29/2023 22:20	212544
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	10/02/2023 19:50	212544
Cobalt	NELAP	0.0001	0.0010		0.0102	mg/L	5	09/29/2023 22:20	212544
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	09/29/2023 22:20	212544
Lithium	*	0.0015	0.0030	J	0.0028	mg/L	5	09/29/2023 22:20	212544
Molybdenum	*	0.0006	0.0015		< 0.0015	mg/L	5	09/29/2023 22:20	212544
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/02/2023 19:50	212544
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	09/29/2023 22:20	212544
CCV recovered outside the upper control limits for Be and Li. Sample results are below the reporting limit. Data is reportable per the TNI standard.									
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	09/29/2023 16:17	212516



Client: Ramboll  
Client Project: JOP-23Q3  
Lab ID: 23091473-046  
Matrix: AQUEOUS

Work Order: 23091473  
Report Date: 16-Nov-23  
Client Sample ID: Field Blank  
Collection Date: 09/28/2023 11:16

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20	J	16	mg/L	1	10/02/2023 13:06	R337236
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	6	10		< 10	mg/L	1	10/04/2023 16:30	R337324
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		< 0.10	mg/L	1	10/03/2023 11:58	R337213
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		< 4	mg/L	1	10/04/2023 16:30	R337334
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		< 0.100	mg/L	1	10/03/2023 14:00	212717
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/04/2023 18:28	212717
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/09/2023 14:26	212717
Barium	NELAP	0.0007	0.0010		< 0.0010	mg/L	5	10/04/2023 18:28	212717
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/04/2023 18:28	212717
Boron	NELAP	0.0092	0.025	J	0.022	mg/L	5	10/04/2023 18:28	212717
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/04/2023 18:28	212717
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	10/04/2023 18:28	212717
Cobalt	NELAP	0.0001	0.0010		< 0.0010	mg/L	5	10/09/2023 14:26	212717
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/04/2023 18:28	212717
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	10/04/2023 18:28	212717
Molybdenum	*	0.0006	0.0015		< 0.0015	mg/L	5	10/10/2023 11:55	212717
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/04/2023 18:28	212717
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/04/2023 18:28	212717
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/03/2023 13:03	212712



## Laboratory Results

Client: Ramboll  
Client Project: JOP-23Q3  
Lab ID: 23091473-047  
Matrix: GROUNDWATER

Work Order: 23091473  
Report Date: 16-Nov-23  
Client Sample ID: G52D Duplicate  
Collection Date: 09/26/2023 10:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		28.81	ft	1	09/26/2023 10:30	R337257
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		3.4	NTU	1	09/26/2023 10:30	R337257
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		55	mV	1	09/26/2023 10:30	R337257
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		462	µS/cm	1	09/26/2023 10:30	R337257
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		15.9	°C	1	09/26/2023 10:30	R337257
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.56	mg/L	1	09/26/2023 10:30	R337257
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.34		1	09/26/2023 10:30	R337257
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		314	mg/L	1	09/29/2023 11:05	R337238
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	31	50		60	mg/L	5	09/28/2023 1:06	R337008
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.27	mg/L	1	09/27/2023 9:13	R336932
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		11	mg/L	1	09/28/2023 1:00	R337023
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100	S	44.8	mg/L	1	10/03/2023 14:01	212717
<i>Matrix spike control limits are not applicable due to high sample/spike ratio.</i>									
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/04/2023 18:40	212717
Arsenic	NELAP	0.0004	0.0010		0.0013	mg/L	5	10/09/2023 13:30	212717
Barium	NELAP	0.0007	0.0010		0.242	mg/L	5	10/04/2023 18:40	212717
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/04/2023 18:40	212717
Boron	NELAP	0.0092	0.0250		0.0314	mg/L	5	10/04/2023 18:40	212717
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/04/2023 18:40	212717
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	10/04/2023 18:40	212717
Cobalt	NELAP	0.0001	0.0010		0.0032	mg/L	5	10/09/2023 13:30	212717
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/04/2023 18:40	212717
Lithium	*	0.0015	0.0030	J	0.0026	mg/L	5	10/04/2023 18:40	212717
Molybdenum	*	0.0006	0.0015	J	0.0013	mg/L	5	10/10/2023 10:23	212717
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/04/2023 18:40	212717
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/04/2023 18:40	212717
<i>RPD for MS/MSD was outside control limits due to sample composition.</i>									
<i>Matrix spike did not recover within control limits due to sample composition.</i>									
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	09/29/2023 16:39	212516



**Sample Summary**

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

**Client:** Ramboll  
**Client Project:** JOP-23Q3

**Work Order:** 23091473  
**Report Date:** 16-Nov-23

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
23091473-001	G01D	Groundwater	6	09/25/2023 13:07
23091473-002	G02D	Groundwater	6	09/25/2023 14:06
23091473-003	G03	Groundwater	6	09/26/2023 12:35
23091473-004	G05	Groundwater	6	09/27/2023 10:14
23091473-005	G06	Groundwater	6	09/27/2023 11:16
23091473-006	G07	Groundwater	6	09/27/2023 11:57
23091473-007	G08	Groundwater	6	09/26/2023 14:32
23091473-008	G09	Groundwater	6	09/26/2023 14:10
23091473-009	G10	Groundwater	6	09/26/2023 13:31
23091473-015	G11	Groundwater	6	09/26/2023 11:47
23091473-035	G51D	Groundwater	6	09/25/2023 15:36
23091473-036	G52D	Groundwater	6	09/26/2023 10:30
23091473-037	G53D	Groundwater	6	09/27/2023 9:31
23091473-038	G54D	Groundwater	6	09/26/2023 12:35
23091473-039	SG02	Groundwater	1	
23091473-045	XSG01	Groundwater	1	09/25/2023 0:00
23091473-046	Field Blank	Aqueous	6	09/28/2023 11:16
23091473-047	G52D Duplicate	Groundwater	6	09/26/2023 10:30



## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
23091473-001A	G01D	09/25/2023 13:07	09/26/2023 16:00		
	Ferrous Iron by CHEMets Kit				09/25/2023 13:07
	Field Elevation Measurements				09/25/2023 13:07
	Standard Methods 2130 B Field				09/25/2023 13:07
	Standard Methods 18th Ed. 2580 B Field				09/25/2023 13:07
	Standard Methods 2320 B (Total) 1997, 2011				09/27/2023 14:55
	Standard Methods 2320 B 1997, 2011				09/27/2023 14:55
	Standard Methods 2510 B Field				09/25/2023 13:07
	Standard Methods 2540 C (Total) 1997, 2011				09/28/2023 11:04
	Standard Methods 2550 B Field				09/25/2023 13:07
	Standard Methods 4500-NO2 B (Total) 2000, 2011				09/26/2023 21:40
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/27/2023 13:27
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/27/2023 13:27
	Standard Methods 4500-O G Field				09/25/2023 13:07
	Standard Methods 4500-P E 1999				09/27/2023 0:00
	Standard Methods 4500-P E 1999, 2011				09/27/2023 11:02
	SW-846 9036 (Total)				09/27/2023 20:09
	SW-846 9040B Field				09/25/2023 13:07
	SW-846 9214 (Total)				09/27/2023 8:41
	SW-846 9251 (Total)				09/27/2023 20:09
23091473-001B	G01D	09/25/2023 13:07	09/26/2023 16:00		
	Standard Methods 2320 B (Dissolved) 1997, 2011				09/27/2023 14:56
	Standard Methods 2320 B (Dissolved) 1997, 2011				09/27/2023 14:56
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				09/26/2023 21:36
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/27/2023 13:30
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/27/2023 13:30
	Standard Methods 4500-P E (Dissolved) 1999, 2011				09/27/2023 11:03
	Standard Methods 4500-P E (Dissolved) 1999				09/27/2023 0:00
	SW-846 9036 (Dissolved)				09/27/2023 20:12
	SW-846 9251 (Dissolved)				09/27/2023 20:12
23091473-001C	G01D	09/25/2023 13:07	09/26/2023 16:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/27/2023 22:04	09/30/2023 9:34
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/27/2023 22:04	09/29/2023 21:23
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/27/2023 22:04	10/02/2023 18:34
	SW-846 7470A (Total)			09/27/2023 11:50	09/29/2023 16:03
23091473-001D	G01D	09/25/2023 13:07	09/26/2023 16:00		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			10/02/2023 8:59	10/02/2023 20:54



## Dates Report

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

**Client:** Ramboll

**Work Order:** 23091473

**Client Project:** JOP-23Q3

**Report Date:** 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	<b>Test Name</b>				
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/03/2023 14:22
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/05/2023 10:43
23091473-001E	G01D	09/25/2023 13:07	09/26/2023 16:00		
	SW-846 9060A				09/28/2023 15:35
23091473-001F	G01D	09/25/2023 13:07	09/26/2023 16:00		
	SW-846 9060A				09/28/2023 18:29
23091473-002A	G02D	09/25/2023 14:06	09/26/2023 16:00		
	Ferrous Iron by CHEMets Kit				09/25/2023 14:06
	Field Elevation Measurements				09/25/2023 14:06
	Standard Methods 2130 B Field				09/25/2023 14:06
	Standard Methods 18th Ed. 2580 B Field				09/25/2023 14:06
	Standard Methods 2320 B (Total) 1997, 2011				09/27/2023 15:02
	Standard Methods 2320 B 1997, 2011				09/27/2023 15:02
	Standard Methods 2510 B Field				09/25/2023 14:06
	Standard Methods 2540 C (Total) 1997, 2011				09/28/2023 11:05
	Standard Methods 2550 B Field				09/25/2023 14:06
	Standard Methods 4500-NO2 B (Total) 2000, 2011				09/26/2023 21:40
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/27/2023 12:57
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/27/2023 12:57
	Standard Methods 4500-O G Field				09/25/2023 14:06
	Standard Methods 4500-P E 1999				09/27/2023 0:00
	Standard Methods 4500-P E 1999, 2011				09/27/2023 11:04
	SW-846 9036 (Total)				09/27/2023 20:15
	SW-846 9040B Field				09/25/2023 14:06
	SW-846 9214 (Total)				09/27/2023 8:42
	SW-846 9251 (Total)				09/27/2023 20:15
23091473-002B	G02D	09/25/2023 14:06	09/26/2023 16:00		
	Standard Methods 2320 B (Dissolved) 1997, 2011				09/27/2023 15:05
	Standard Methods 2320 B (Dissolved) 1997, 2011				09/27/2023 15:05
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				09/26/2023 21:37
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/27/2023 13:38
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/27/2023 13:38
	Standard Methods 4500-P E (Dissolved) 1999, 2011				09/27/2023 11:05
	Standard Methods 4500-P E (Dissolved) 1999				09/27/2023 0:00
	SW-846 9036 (Dissolved)				09/27/2023 20:20
	SW-846 9251 (Dissolved)				09/27/2023 20:20
23091473-002C	G02D	09/25/2023 14:06	09/26/2023 16:00		



## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	<b>Test Name</b>				
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/27/2023 22:04	09/30/2023 9:36
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/27/2023 22:04	09/29/2023 21:29
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/27/2023 22:04	10/02/2023 18:40
	SW-846 7470A (Total)			09/27/2023 11:50	09/29/2023 16:06
23091473-002D	G02D	09/25/2023 14:06	09/26/2023 16:00		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			10/02/2023 8:59	10/02/2023 20:55
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/03/2023 14:28
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/05/2023 10:47
23091473-002E	G02D	09/25/2023 14:06	09/26/2023 16:00		
	SW-846 9060A				09/28/2023 15:53
23091473-002F	G02D	09/25/2023 14:06	09/26/2023 16:00		
	SW-846 9060A				09/28/2023 18:35
23091473-003A	G03	09/26/2023 12:35	09/26/2023 16:00		
	Ferrous Iron by CHEMets Kit				09/26/2023 12:35
	Field Elevation Measurements				09/26/2023 12:35
	Standard Methods 2130 B Field				09/26/2023 12:35
	Standard Methods 18th Ed. 2580 B Field				09/26/2023 12:35
	Standard Methods 2320 B (Total) 1997, 2011				09/27/2023 15:09
	Standard Methods 2320 B 1997, 2011				09/27/2023 15:09
	Standard Methods 2510 B Field				09/26/2023 12:35
	Standard Methods 2540 C (Total) 1997, 2011				09/29/2023 9:50
	Standard Methods 2550 B Field				09/26/2023 12:35
	Standard Methods 4500-NO2 B (Total) 2000, 2011				09/26/2023 21:41
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/27/2023 14:25
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/27/2023 14:25
	Standard Methods 4500-O G Field				09/26/2023 12:35
	Standard Methods 4500-P E 1999				09/27/2023 0:00
	Standard Methods 4500-P E 1999, 2011				09/27/2023 11:06
	SW-846 9036 (Total)				09/29/2023 23:09
	SW-846 9040B Field				09/26/2023 12:35
	SW-846 9214 (Total)				09/27/2023 8:44
	SW-846 9251 (Total)				09/27/2023 20:23
23091473-003B	G03	09/26/2023 12:35	09/26/2023 16:00		
	Standard Methods 2320 B (Dissolved) 1997, 2011				09/27/2023 15:11
	Standard Methods 2320 B (Dissolved) 1997, 2011				09/27/2023 15:11
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				09/26/2023 21:38
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/28/2023 10:20





## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/28/2023 10:20
	Standard Methods 4500-P E (Dissolved) 1999, 2011				09/27/2023 11:07
	Standard Methods 4500-P E (Dissolved) 1999				09/27/2023 0:00
	SW-846 9036 (Dissolved)				09/29/2023 23:12
	SW-846 9251 (Dissolved)				09/27/2023 20:25
23091473-003C	G03	09/26/2023 12:35	09/26/2023 16:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/27/2023 22:04	09/30/2023 9:37
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/27/2023 22:04	09/29/2023 21:35
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/27/2023 22:04	10/02/2023 18:47
	SW-846 7470A (Total)			09/27/2023 11:50	09/29/2023 16:08
23091473-003D	G03	09/26/2023 12:35	09/26/2023 16:00		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			10/02/2023 8:59	10/02/2023 20:57
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/03/2023 15:19
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/05/2023 10:51
23091473-003E	G03	09/26/2023 12:35	09/26/2023 16:00		
	SW-846 9060A				09/28/2023 15:59
23091473-003F	G03	09/26/2023 12:35	09/26/2023 16:00		
	SW-846 9060A				09/28/2023 18:41
23091473-004A	G05	09/27/2023 10:14	09/27/2023 18:42		
	Ferrous Iron by CHEMets Kit				09/27/2023 10:14
	Field Elevation Measurements				09/27/2023 10:14
	Standard Methods 2130 B Field				09/27/2023 10:14
	Standard Methods 18th Ed. 2580 B Field				09/27/2023 10:14
	Standard Methods 2320 B (Total) 1997, 2011				10/03/2023 10:04
	Standard Methods 2320 B 1997, 2011				10/03/2023 10:04
	Standard Methods 2510 B Field				09/27/2023 10:14
	Standard Methods 2540 C (Total) 1997, 2011				10/02/2023 10:28
	Standard Methods 2550 B Field				09/27/2023 10:14
	Standard Methods 4500-NO2 B (Total) 2000, 2011				09/28/2023 17:03
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/28/2023 11:48
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/28/2023 11:48
	Standard Methods 4500-O G Field				09/27/2023 10:14
	Standard Methods 4500-P E 1999				09/28/2023 0:00
	Standard Methods 4500-P E 1999, 2011				09/28/2023 12:35
	SW-846 9036 (Total)				10/03/2023 22:53
	SW-846 9040B Field				09/27/2023 10:14
	SW-846 9214 (Total)				10/03/2023 11:20





## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name				Prep Date/Time	Analysis Date/Time
	SW-846 9251 (Total)				10/03/2023 22:48
23091473-004B	G05	09/27/2023 10:14	09/27/2023 18:42		
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/02/2023 15:24
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/02/2023 15:24
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				09/28/2023 17:13
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/28/2023 12:45
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/28/2023 12:45
	Standard Methods 4500-P E (Dissolved) 1999, 2011				09/28/2023 12:35
	Standard Methods 4500-P E (Dissolved) 1999				09/28/2023 0:00
	SW-846 9036 (Dissolved)				10/03/2023 13:23
	SW-846 9251 (Dissolved)				10/03/2023 13:18
23091473-004C	G05	09/27/2023 10:14	09/27/2023 18:42		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/28/2023 18:43	09/29/2023 21:57
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/28/2023 18:43	10/02/2023 18:36
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/28/2023 18:43	10/02/2023 13:31
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/28/2023 18:43	10/03/2023 9:28
	SW-846 7470A (Total)			10/02/2023 14:03	10/03/2023 13:26
23091473-004D	G05	09/27/2023 10:14	09/27/2023 18:42		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			10/02/2023 9:00	10/02/2023 20:58
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 9:00	10/03/2023 15:24
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 9:00	10/05/2023 10:55
23091473-004E	G05	09/27/2023 10:14	09/27/2023 18:42		
	SW-846 9060A				10/02/2023 17:42
23091473-004F	G05	09/27/2023 10:14	09/27/2023 18:42		
	SW-846 9060A				10/02/2023 13:05
23091473-005A	G06	09/27/2023 11:16	09/27/2023 18:42		
	Ferrous Iron by CHEMets Kit				09/27/2023 11:16
	Field Elevation Measurements				09/27/2023 11:16
	Standard Methods 2130 B Field				09/27/2023 11:16
	Standard Methods 18th Ed. 2580 B Field				09/27/2023 11:16
	Standard Methods 2320 B (Total) 1997, 2011				10/03/2023 10:16
	Standard Methods 2320 B 1997, 2011				10/03/2023 10:16
	Standard Methods 2510 B Field				09/27/2023 11:16
	Standard Methods 2540 C (Total) 1997, 2011				10/02/2023 10:28
	Standard Methods 2550 B Field				09/27/2023 11:16
	Standard Methods 4500-NO2 B (Total) 2000, 2011				09/28/2023 17:04
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/28/2023 11:50



## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/28/2023 11:50
	Standard Methods 4500-O G Field				09/27/2023 11:16
	Standard Methods 4500-P E 1999				09/28/2023 0:00
	Standard Methods 4500-P E 1999, 2011				09/28/2023 12:39
	SW-846 9036 (Total)				10/03/2023 23:02
	SW-846 9040B Field				09/27/2023 11:16
	SW-846 9214 (Total)				10/03/2023 11:21
	SW-846 9251 (Total)				10/03/2023 22:56
23091473-005B	G06	09/27/2023 11:16	09/27/2023 18:42		
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/02/2023 15:28
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/02/2023 15:28
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				09/28/2023 17:07
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/28/2023 12:47
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/28/2023 12:47
	Standard Methods 4500-P E (Dissolved) 1999, 2011				09/28/2023 12:39
	Standard Methods 4500-P E (Dissolved) 1999				09/28/2023 0:00
	SW-846 9036 (Dissolved)				10/03/2023 13:31
	SW-846 9251 (Dissolved)				10/03/2023 13:26
23091473-005C	G06	09/27/2023 11:16	09/27/2023 18:42		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/28/2023 18:43	09/29/2023 21:59
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/28/2023 18:43	10/02/2023 18:38
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/28/2023 18:43	10/02/2023 13:37
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/28/2023 18:43	10/03/2023 9:33
	SW-846 7470A (Total)			10/02/2023 14:03	10/03/2023 13:28
23091473-005D	G06	09/27/2023 11:16	09/27/2023 18:42		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			10/02/2023 9:00	10/02/2023 21:00
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 9:00	10/03/2023 15:30
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 9:00	10/05/2023 10:59
23091473-005E	G06	09/27/2023 11:16	09/27/2023 18:42		
	SW-846 9060A				10/02/2023 18:00
23091473-005F	G06	09/27/2023 11:16	09/27/2023 18:42		
	SW-846 9060A				10/02/2023 13:11
23091473-006A	G07	09/27/2023 11:57	09/27/2023 18:42		
	Ferrous Iron by CHEMets Kit				09/27/2023 11:57
	Field Elevation Measurements				09/27/2023 11:57
	Standard Methods 2130 B Field				09/27/2023 11:57
	Standard Methods 18th Ed. 2580 B Field				09/27/2023 11:57



## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	<b>Test Name</b>				
	Standard Methods 2320 B (Total) 1997, 2011				10/03/2023 10:30
	Standard Methods 2320 B 1997, 2011				10/03/2023 10:30
	Standard Methods 2510 B Field				09/27/2023 11:57
	Standard Methods 2540 C (Total) 1997, 2011				10/02/2023 10:28
	Standard Methods 2550 B Field				09/27/2023 11:57
	Standard Methods 4500-NO2 B (Total) 2000, 2011				09/28/2023 17:03
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/28/2023 11:53
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/28/2023 11:53
	Standard Methods 4500-O G Field				09/27/2023 11:57
	Standard Methods 4500-P E 1999				09/28/2023 0:00
	Standard Methods 4500-P E 1999, 2011				09/28/2023 13:38
	SW-846 9036 (Total)				10/03/2023 23:18
	SW-846 9040B Field				09/27/2023 11:57
	SW-846 9214 (Total)				10/03/2023 11:23
	SW-846 9251 (Total)				10/03/2023 23:07
23091473-006B	G07	09/27/2023 11:57	09/27/2023 18:42		
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/02/2023 15:31
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/02/2023 15:31
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				09/28/2023 17:07
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/28/2023 13:03
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/28/2023 13:03
	Standard Methods 4500-P E (Dissolved) 1999, 2011				09/28/2023 13:39
	Standard Methods 4500-P E (Dissolved) 1999				09/28/2023 0:00
	SW-846 9036 (Dissolved)				10/03/2023 14:01
	SW-846 9251 (Dissolved)				10/03/2023 13:34
23091473-006C	G07	09/27/2023 11:57	09/27/2023 18:42		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/28/2023 18:43	09/29/2023 22:08
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/28/2023 18:43	10/02/2023 18:39
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/28/2023 18:43	10/02/2023 13:42
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/28/2023 18:43	10/03/2023 9:45
	SW-846 7470A (Total)			10/02/2023 14:03	10/03/2023 13:30
23091473-006D	G07	09/27/2023 11:57	09/27/2023 18:42		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			10/02/2023 9:00	10/02/2023 21:11
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 9:00	10/03/2023 15:36
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 9:00	10/05/2023 11:43
23091473-006E	G07	09/27/2023 11:57	09/27/2023 18:42		
	SW-846 9060A				10/02/2023 18:06



## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
23091473-006F	G07	09/27/2023 11:57	09/27/2023 18:42		
	SW-846 9060A				10/02/2023 13:17
23091473-007A	G08	09/26/2023 14:32	09/27/2023 18:42		
	Ferrous Iron by CHEMets Kit				09/26/2023 14:32
	Field Elevation Measurements				09/26/2023 14:32
	Standard Methods 2130 B Field				09/26/2023 14:32
	Standard Methods 18th Ed. 2580 B Field				09/26/2023 14:32
	Standard Methods 2320 B (Total) 1997, 2011				10/03/2023 10:46
	Standard Methods 2320 B 1997, 2011				10/03/2023 10:46
	Standard Methods 2510 B Field				09/26/2023 14:32
	Standard Methods 2540 C (Total) 1997, 2011				09/29/2023 9:51
	Standard Methods 2550 B Field				09/26/2023 14:32
	Standard Methods 4500-NO2 B (Total) 2000, 2011				09/28/2023 10:22
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/28/2023 10:27
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/28/2023 10:27
	Standard Methods 4500-O G Field				09/26/2023 14:32
	Standard Methods 4500-P E 1999				09/28/2023 0:00
	Standard Methods 4500-P E 1999, 2011				09/28/2023 12:22
	SW-846 9036 (Total)				10/03/2023 23:46
	SW-846 9040B Field				09/26/2023 14:32
	SW-846 9214 (Total)				10/03/2023 11:25
	SW-846 9251 (Total)				10/03/2023 23:42
23091473-007B	G08	09/26/2023 14:32	09/27/2023 18:42		
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/02/2023 15:37
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/02/2023 15:37
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				09/28/2023 10:23
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/28/2023 10:51
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/28/2023 10:51
	Standard Methods 4500-P E (Dissolved) 1999, 2011				09/28/2023 12:23
	Standard Methods 4500-P E (Dissolved) 1999				09/28/2023 0:00
	SW-846 9036 (Dissolved)				10/03/2023 14:16
	SW-846 9251 (Dissolved)				10/03/2023 14:11
23091473-007C	G08	09/26/2023 14:32	09/27/2023 18:42		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/28/2023 18:43	09/29/2023 22:09
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/28/2023 18:43	10/02/2023 18:41
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/28/2023 18:43	10/02/2023 13:48
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/28/2023 18:43	10/03/2023 9:51



## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	SW-846 7470A (Total)			10/02/2023 14:03	10/03/2023 13:37
23091473-007D	G08	09/26/2023 14:32	09/27/2023 18:42		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			10/02/2023 8:59	10/02/2023 21:13
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/03/2023 15:41
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/05/2023 11:47
23091473-007E	G08	09/26/2023 14:32	09/27/2023 18:42		
	SW-846 9060A				10/02/2023 18:11
23091473-007F	G08	09/26/2023 14:32	09/27/2023 18:42		
	SW-846 9060A				10/02/2023 13:24
23091473-008A	G09	09/26/2023 14:10	09/27/2023 18:42		
	Ferrous Iron by CHEMets Kit				09/26/2023 14:10
	Field Elevation Measurements				09/26/2023 14:10
	Standard Methods 2130 B Field				09/26/2023 14:10
	Standard Methods 18th Ed. 2580 B Field				09/26/2023 14:10
	Standard Methods 2320 B (Total) 1997, 2011				10/03/2023 11:23
	Standard Methods 2320 B 1997, 2011				10/03/2023 11:23
	Standard Methods 2510 B Field				09/26/2023 14:10
	Standard Methods 2540 C (Total) 1997, 2011				09/29/2023 10:12
	Standard Methods 2550 B Field				09/26/2023 14:10
	Standard Methods 4500-NO2 B (Total) 2000, 2011				09/28/2023 10:22
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/28/2023 10:25
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/28/2023 10:25
	Standard Methods 4500-O G Field				09/26/2023 14:10
	Standard Methods 4500-P E 1999				09/28/2023 0:00
	Standard Methods 4500-P E 1999, 2011				09/28/2023 12:27
	SW-846 9036 (Total)				10/03/2023 23:54
	SW-846 9040B Field				09/26/2023 14:10
	SW-846 9214 (Total)				10/03/2023 11:26
	SW-846 9251 (Total)				10/03/2023 23:50
23091473-008B	G09	09/26/2023 14:10	09/27/2023 18:42		
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/02/2023 15:39
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/02/2023 15:39
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				09/28/2023 10:23
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/28/2023 10:31
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/28/2023 10:31
	Standard Methods 4500-P E (Dissolved) 1999, 2011				09/28/2023 12:27
	Standard Methods 4500-P E (Dissolved) 1999				09/28/2023 0:00



## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
	SW-846 9036 (Dissolved)				10/03/2023 14:24
	SW-846 9251 (Dissolved)				10/03/2023 14:19
23091473-008C	G09	09/26/2023 14:10	09/27/2023 18:42		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/28/2023 18:43	09/29/2023 22:16
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/28/2023 18:43	10/02/2023 18:42
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/28/2023 18:43	10/02/2023 13:53
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/28/2023 18:43	10/03/2023 9:56
	SW-846 7470A (Total)			10/02/2023 14:03	10/03/2023 13:39
23091473-008D	G09	09/26/2023 14:10	09/27/2023 18:42		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			10/02/2023 8:59	10/02/2023 21:14
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/03/2023 15:47
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/05/2023 11:51
23091473-008E	G09	09/26/2023 14:10	09/27/2023 18:42		
	SW-846 9060A				10/02/2023 18:18
23091473-008F	G09	09/26/2023 14:10	09/27/2023 18:42		
	SW-846 9060A				10/02/2023 13:29
23091473-009A	G10	09/26/2023 13:31	09/27/2023 18:42		
	Ferrous Iron by CHEMets Kit				09/26/2023 13:31
	Field Elevation Measurements				09/26/2023 13:31
	Standard Methods 2130 B Field				09/26/2023 13:31
	Standard Methods 18th Ed. 2580 B Field				09/26/2023 13:31
	Standard Methods 2320 B (Total) 1997, 2011				10/03/2023 11:35
	Standard Methods 2320 B 1997, 2011				10/03/2023 11:35
	Standard Methods 2510 B Field				09/26/2023 13:31
	Standard Methods 2540 C (Total) 1997, 2011				09/29/2023 10:13
	Standard Methods 2550 B Field				09/26/2023 13:31
	Standard Methods 4500-NO2 B (Total) 2000, 2011				09/28/2023 10:21
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/28/2023 10:22
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/28/2023 10:22
	Standard Methods 4500-O G Field				09/26/2023 13:31
	Standard Methods 4500-P E 1999				09/28/2023 0:00
	Standard Methods 4500-P E 1999, 2011				09/28/2023 12:29
	SW-846 9036 (Total)				10/04/2023 0:03
	SW-846 9040B Field				09/26/2023 13:31
	SW-846 9214 (Total)				10/03/2023 11:28
	SW-846 9251 (Total)				10/03/2023 23:58
23091473-009B	G10	09/26/2023 13:31	09/27/2023 18:42		



## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	<b>Test Name</b>				
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/02/2023 15:44
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/02/2023 15:44
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				09/28/2023 10:22
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/28/2023 10:29
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/28/2023 10:29
	Standard Methods 4500-P E (Dissolved) 1999, 2011				09/28/2023 12:30
	Standard Methods 4500-P E (Dissolved) 1999				09/28/2023 0:00
	SW-846 9036 (Dissolved)				10/03/2023 14:46
	SW-846 9251 (Dissolved)				10/03/2023 14:27
23091473-009C	G10	09/26/2023 13:31	09/27/2023 18:42		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/28/2023 18:43	09/29/2023 22:18
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/28/2023 18:43	10/02/2023 18:53
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/28/2023 18:43	10/02/2023 13:59
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/28/2023 18:43	10/03/2023 11:10
	SW-846 7470A (Total)			10/02/2023 14:03	10/03/2023 13:42
23091473-009D	G10	09/26/2023 13:31	09/27/2023 18:42		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			10/02/2023 8:59	10/02/2023 21:16
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/03/2023 15:52
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/05/2023 11:55
23091473-009E	G10	09/26/2023 13:31	09/27/2023 18:42		
	SW-846 9060A				10/02/2023 18:24
23091473-009F	G10	09/26/2023 13:31	09/27/2023 18:42		
	SW-846 9060A				10/02/2023 13:35
23091473-015A	G11	09/26/2023 11:47	09/26/2023 16:00		
	Ferrous Iron by CHEMets Kit				09/26/2023 11:47
	Field Elevation Measurements				09/26/2023 11:47
	Standard Methods 2130 B Field				09/26/2023 11:47
	Standard Methods 18th Ed. 2580 B Field				09/26/2023 11:47
	Standard Methods 2320 B (Total) 1997, 2011				10/03/2023 13:45
	Standard Methods 2320 B 1997, 2011				10/03/2023 13:45
	Standard Methods 2510 B Field				09/26/2023 11:47
	Standard Methods 2540 C (Total) 1997, 2011				09/29/2023 10:14
	Standard Methods 2550 B Field				09/26/2023 11:47
	Standard Methods 4500-NO2 B (Total) 2000, 2011				09/27/2023 16:49
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/27/2023 14:33
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/27/2023 14:33
	Standard Methods 4500-O G Field				09/26/2023 11:47





## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Test Name	Prep Date/Time	Analysis Date/Time
				Standard Methods 4500-P E 1999		09/27/2023 0:00
				Standard Methods 4500-P E 1999, 2011		09/27/2023 11:41
				SW-846 9036 (Total)		09/29/2023 23:17
				SW-846 9040B Field		09/26/2023 11:47
				SW-846 9214 (Total)		09/27/2023 8:46
				SW-846 9251 (Total)		09/27/2023 20:31
23091473-015B	G11	09/26/2023 11:47	09/26/2023 16:00			
				Standard Methods 2320 B (Dissolved) 1997, 2011		10/04/2023 13:53
				Standard Methods 2320 B (Dissolved) 1997, 2011		10/04/2023 13:53
				Standard Methods 4500-NO2 B (Dissolved) 2000, 2011		09/27/2023 16:52
				Standard Methods 4500-NO3 F (Dissolved) 2000, 2011		09/27/2023 13:16
				Standard Methods 4500-NO3 F (Dissolved) 2000, 2011		09/27/2023 13:16
				Standard Methods 4500-P E (Dissolved) 1999, 2011		09/27/2023 11:42
				Standard Methods 4500-P E (Dissolved) 1999		09/27/2023 0:00
				SW-846 9036 (Dissolved)		09/29/2023 23:35
				SW-846 9251 (Dissolved)		09/27/2023 20:33
23091473-015C	G11	09/26/2023 11:47	09/26/2023 16:00			
				SW-846 3005A, 6010B, Metals by ICP (Total)	09/27/2023 22:04	09/30/2023 9:39
				SW-846 3005A, 6020A, Metals by ICPMS (Total)	09/27/2023 22:04	09/29/2023 22:07
				SW-846 3005A, 6020A, Metals by ICPMS (Total)	09/27/2023 22:04	10/02/2023 19:38
				SW-846 7470A (Total)	09/27/2023 11:50	09/29/2023 16:10
23091473-015D	G11	09/26/2023 11:47	09/26/2023 16:00			
				SW-846 3005A, 6010B, Metals by ICP (Dissolved)	10/02/2023 8:59	10/02/2023 21:17
				SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)	10/02/2023 8:59	10/03/2023 15:58
				SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)	10/02/2023 8:59	10/05/2023 11:59
23091473-015E	G11	09/26/2023 11:47	09/26/2023 16:00			
				SW-846 9060A		09/28/2023 16:05
23091473-015F	G11	09/26/2023 11:47	09/26/2023 16:00			
				SW-846 9060A		09/28/2023 18:47
23091473-035A	G51D	09/25/2023 15:36	09/26/2023 16:00			
				Ferrous Iron by CHEMets Kit		09/25/2023 15:36
				Field Elevation Measurements		09/25/2023 15:36
				Standard Methods 2130 B Field		09/25/2023 15:36
				Standard Methods 18th Ed. 2580 B Field		09/25/2023 15:36
				Standard Methods 2320 B (Total) 1997, 2011		10/04/2023 14:00
				Standard Methods 2320 B 1997, 2011		10/04/2023 14:00
				Standard Methods 2510 B Field		09/25/2023 15:36





## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
	Standard Methods 2540 C (Total) 1997, 2011				09/28/2023 11:05
	Standard Methods 2550 B Field				09/25/2023 15:36
	Standard Methods 4500-NO2 B (Total) 2000, 2011				09/26/2023 21:41
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/27/2023 12:59
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/27/2023 12:59
	Standard Methods 4500-O G Field				09/25/2023 15:36
	Standard Methods 4500-P E 1999				09/27/2023 0:00
	Standard Methods 4500-P E 1999, 2011				09/27/2023 11:13
	SW-846 9036 (Total)				09/27/2023 21:03
	SW-846 9040B Field				09/25/2023 15:36
	SW-846 9214 (Total)				09/27/2023 8:48
	SW-846 9251 (Total)				09/27/2023 20:52
23091473-035B	G51D	09/25/2023 15:36	09/26/2023 16:00		
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/04/2023 14:03
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/04/2023 14:03
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				09/26/2023 21:39
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/27/2023 13:41
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/27/2023 13:41
	Standard Methods 4500-P E (Dissolved) 1999, 2011				09/27/2023 11:13
	Standard Methods 4500-P E (Dissolved) 1999				09/27/2023 0:00
	SW-846 9036 (Dissolved)				09/27/2023 21:24
	SW-846 9251 (Dissolved)				09/27/2023 21:13
23091473-035C	G51D	09/25/2023 15:36	09/26/2023 16:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/27/2023 22:04	09/30/2023 9:41
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/27/2023 22:04	09/29/2023 22:33
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/27/2023 22:04	10/02/2023 18:53
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/27/2023 22:04	10/05/2023 11:03
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			10/09/2023 7:30	10/10/2023 12:06
	SW-846 7470A (Total)			09/27/2023 11:50	09/29/2023 16:12
23091473-035D	G51D	09/25/2023 15:36	09/26/2023 16:00		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			10/02/2023 8:59	10/02/2023 21:22
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/03/2023 16:44
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/05/2023 12:47
23091473-035E	G51D	09/25/2023 15:36	09/26/2023 16:00		
	SW-846 9060A				09/28/2023 16:11
23091473-035F	G51D	09/25/2023 15:36	09/26/2023 16:00		
	SW-846 9060A				09/28/2023 19:05



## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
23091473-036A	G52D	09/26/2023 10:30	09/26/2023 16:00		
	Ferrous Iron by CHEMets Kit				09/26/2023 10:30
	Field Elevation Measurements				09/26/2023 10:30
	Standard Methods 2130 B Field				09/26/2023 10:30
	Standard Methods 18th Ed. 2580 B Field				09/26/2023 10:30
	Standard Methods 2320 B (Total) 1997, 2011				10/03/2023 15:21
	Standard Methods 2320 B 1997, 2011				10/03/2023 15:21
	Standard Methods 2510 B Field				09/26/2023 10:30
	Standard Methods 2540 C (Total) 1997, 2011				09/29/2023 10:32
	Standard Methods 2550 B Field				09/26/2023 10:30
	Standard Methods 4500-NO2 B (Total) 2000, 2011				09/27/2023 16:50
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/27/2023 14:35
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/27/2023 14:35
	Standard Methods 4500-O G Field				09/26/2023 10:30
	Standard Methods 4500-P E 1999				09/27/2023 0:00
	Standard Methods 4500-P E 1999, 2011				09/27/2023 11:14
	SW-846 9036 (Total)				09/27/2023 21:56
	SW-846 9040B Field				09/26/2023 10:30
	SW-846 9214 (Total)				09/27/2023 8:51
	SW-846 9251 (Total)				09/27/2023 21:50
23091473-036B	G52D	09/26/2023 10:30	09/26/2023 16:00		
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/04/2023 11:54
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/04/2023 11:54
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				09/27/2023 16:53
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/27/2023 13:19
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/27/2023 13:19
	Standard Methods 4500-P E (Dissolved) 1999, 2011				09/27/2023 11:16
	Standard Methods 4500-P E (Dissolved) 1999				09/27/2023 0:00
	SW-846 9036 (Dissolved)				09/27/2023 22:04
	SW-846 9251 (Dissolved)				09/27/2023 21:59
23091473-036C	G52D	09/26/2023 10:30	09/26/2023 16:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/27/2023 22:04	09/30/2023 9:45
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/27/2023 22:04	09/29/2023 22:14
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/27/2023 22:04	10/02/2023 19:44
	SW-846 7470A (Total)			09/27/2023 11:50	09/29/2023 16:15
23091473-036D	G52D	09/26/2023 10:30	09/26/2023 16:00		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			10/02/2023 8:59	10/02/2023 21:24



## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	<b>Test Name</b>				
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/03/2023 16:49
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/05/2023 12:51
23091473-036E	G52D	09/26/2023 10:30	09/26/2023 16:00		
	SW-846 9060A				10/02/2023 12:23
23091473-036F	G52D	09/26/2023 10:30	09/26/2023 16:00		
	SW-846 9060A				09/28/2023 19:11
23091473-037A	G53D	09/27/2023 9:31	09/27/2023 18:42		
	Ferrous Iron by CHEMets Kit				09/27/2023 9:31
	Field Elevation Measurements				09/27/2023 9:31
	Standard Methods 2130 B Field				09/27/2023 9:31
	Standard Methods 18th Ed. 2580 B Field				09/27/2023 9:31
	Standard Methods 2320 B (Total) 1997, 2011				10/03/2023 15:24
	Standard Methods 2320 B 1997, 2011				10/03/2023 15:24
	Standard Methods 2510 B Field				09/27/2023 9:31
	Standard Methods 2540 C (Total) 1997, 2011				10/02/2023 11:55
	Standard Methods 2550 B Field				09/27/2023 9:31
	Standard Methods 4500-NO2 B (Total) 2000, 2011				09/28/2023 17:06
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/28/2023 12:43
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/28/2023 12:43
	Standard Methods 4500-O G Field				09/27/2023 9:31
	Standard Methods 4500-P E 1999				09/28/2023 0:00
	Standard Methods 4500-P E 1999, 2011				09/28/2023 14:58
	SW-846 9036 (Total)				10/04/2023 0:16
	SW-846 9040B Field				09/27/2023 9:31
	SW-846 9214 (Total)				10/03/2023 10:32
	SW-846 9251 (Total)				10/04/2023 0:11
23091473-037B	G53D	09/27/2023 9:31	09/27/2023 18:42		
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/04/2023 11:23
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/04/2023 11:23
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				09/28/2023 17:13
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/28/2023 13:47
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/28/2023 13:47
	Standard Methods 4500-P E (Dissolved) 1999, 2011				09/28/2023 14:58
	Standard Methods 4500-P E (Dissolved) 1999				09/28/2023 0:00
	SW-846 9036 (Dissolved)				10/03/2023 19:02
	SW-846 9251 (Dissolved)				10/03/2023 18:56
23091473-037C	G53D	09/27/2023 9:31	09/27/2023 18:42		



## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
	SW-846 3005A, 6010B, Metals by ICP (Total)			10/02/2023 19:04	10/03/2023 13:28
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			10/02/2023 19:04	10/04/2023 16:49
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			10/02/2023 19:04	10/09/2023 13:19
	SW-846 7470A (Total)			10/02/2023 14:08	10/03/2023 13:01
23091473-037D	G53D	09/27/2023 9:31	09/27/2023 18:42		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			10/02/2023 9:08	10/02/2023 22:48
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 9:08	10/04/2023 0:52
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 9:08	10/05/2023 13:56
23091473-037E	G53D	09/27/2023 9:31	09/27/2023 18:42		
	SW-846 9060A				10/02/2023 22:23
23091473-037F	G53D	09/27/2023 9:31	09/27/2023 18:42		
	SW-846 9060A				10/02/2023 16:53
23091473-038A	G54D	09/26/2023 12:35	09/26/2023 16:00		
	Ferrous Iron by CHEMets Kit				09/26/2023 12:35
	Field Elevation Measurements				09/26/2023 12:35
	Standard Methods 2130 B Field				09/26/2023 12:35
	Standard Methods 18th Ed. 2580 B Field				09/26/2023 12:35
	Standard Methods 2320 B (Total) 1997, 2011				10/03/2023 15:27
	Standard Methods 2320 B 1997, 2011				10/03/2023 15:27
	Standard Methods 2510 B Field				09/26/2023 12:35
	Standard Methods 2540 C (Total) 1997, 2011				09/29/2023 10:32
	Standard Methods 2550 B Field				09/26/2023 12:35
	Standard Methods 4500-NO2 B (Total) 2000, 2011				09/27/2023 16:50
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/27/2023 14:38
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/27/2023 14:38
	Standard Methods 4500-O G Field				09/26/2023 12:35
	Standard Methods 4500-P E 1999				09/27/2023 0:00
	Standard Methods 4500-P E 1999, 2011				09/27/2023 11:24
	SW-846 9036 (Total)				09/27/2023 22:20
	SW-846 9040B Field				09/26/2023 12:35
	SW-846 9214 (Total)				09/27/2023 8:53
	SW-846 9251 (Total)				09/27/2023 22:09
23091473-038B	G54D	09/26/2023 12:35	09/26/2023 16:00		
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/04/2023 12:00
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/04/2023 12:00
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				09/27/2023 16:53
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/27/2023 13:56



## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	<b>Test Name</b>				
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/27/2023 13:56
	Standard Methods 4500-P E (Dissolved) 1999, 2011				09/27/2023 11:25
	Standard Methods 4500-P E (Dissolved) 1999				09/27/2023 0:00
	SW-846 9036 (Dissolved)				09/27/2023 22:57
	SW-846 9251 (Dissolved)				09/27/2023 22:46
23091473-038C	G54D	09/26/2023 12:35	09/26/2023 16:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/27/2023 22:04	09/30/2023 9:47
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/27/2023 22:04	09/29/2023 22:20
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			09/27/2023 22:04	10/02/2023 19:50
	SW-846 7470A (Total)			09/27/2023 11:50	09/29/2023 16:17
23091473-038D	G54D	09/26/2023 12:35	09/26/2023 16:00		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			10/02/2023 8:59	10/02/2023 21:44
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/03/2023 16:55
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 8:59	10/05/2023 13:32
23091473-038E	G54D	09/26/2023 12:35	09/26/2023 16:00		
	SW-846 9060A				09/28/2023 17:05
23091473-038F	G54D	09/26/2023 12:35	09/26/2023 16:00		
	SW-846 9060A				09/28/2023 19:17
23091473-046A	Field Blank	09/28/2023 11:16	09/28/2023 15:05		
	Standard Methods 2320 B (Total) 1997, 2011				10/04/2023 9:52
	Standard Methods 2320 B 1997, 2011				10/04/2023 9:52
	Standard Methods 2540 C (Total) 1997, 2011				10/02/2023 13:06
	Standard Methods 4500-NO2 B (Total) 2000, 2011				09/29/2023 15:57
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/29/2023 15:05
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/29/2023 15:05
	Standard Methods 4500-P E 1999				09/29/2023 13:51
	Standard Methods 4500-P E 1999, 2011				09/29/2023 10:02
	SW-846 9036 (Total)				10/04/2023 16:30
	SW-846 9214 (Total)				10/03/2023 11:58
	SW-846 9251 (Total)				10/04/2023 16:30
23091473-046B	Field Blank	09/28/2023 11:16	09/28/2023 15:05		
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/04/2023 11:30
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/04/2023 11:30
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				09/29/2023 15:59
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/29/2023 15:51
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/29/2023 15:51
	Standard Methods 4500-P E (Dissolved) 1999, 2011				09/29/2023 10:02



## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	Standard Methods 4500-P E (Dissolved) 1999				09/29/2023 13:51
	SW-846 9036 (Dissolved)				10/03/2023 19:20
	SW-846 9251 (Dissolved)				10/03/2023 19:20
23091473-046C	Field Blank	09/28/2023 11:16	09/28/2023 15:05		
	SW-846 3005A, 6010B, Metals by ICP (Total)			10/02/2023 19:04	10/03/2023 14:00
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			10/02/2023 19:04	10/04/2023 18:28
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			10/02/2023 19:04	10/09/2023 14:26
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			10/02/2023 19:04	10/10/2023 11:55
	SW-846 7470A (Total)			10/02/2023 14:08	10/03/2023 13:03
23091473-046D	Field Blank	09/28/2023 11:16	09/28/2023 15:05		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			10/02/2023 9:08	10/02/2023 22:53
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 9:08	10/04/2023 15:17
23091473-046E	Field Blank	09/28/2023 11:16	09/28/2023 15:05		
	SW-846 9060A				10/02/2023 22:29
23091473-046F	Field Blank	09/28/2023 11:16	09/28/2023 15:05		
	SW-846 9060A				10/02/2023 17:30
23091473-047A	G52D Duplicate	09/26/2023 10:30	09/26/2023 16:00		
	Ferrous Iron by CHEMets Kit				09/26/2023 10:30
	Field Elevation Measurements				09/26/2023 10:30
	Standard Methods 2130 B Field				09/26/2023 10:30
	Standard Methods 18th Ed. 2580 B Field				09/26/2023 10:30
	Standard Methods 2320 B (Total) 1997, 2011				10/03/2023 15:41
	Standard Methods 2320 B 1997, 2011				10/03/2023 15:41
	Standard Methods 2510 B Field				09/26/2023 10:30
	Standard Methods 2540 C (Total) 1997, 2011				09/29/2023 11:05
	Standard Methods 2550 B Field				09/26/2023 10:30
	Standard Methods 4500-NO2 B (Total) 2000, 2011				09/27/2023 16:51
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/27/2023 15:11
	Standard Methods 4500-NO3 F (Total) 2000, 2011				09/27/2023 15:11
	Standard Methods 4500-O G Field				09/26/2023 10:30
	Standard Methods 4500-P E 1999				09/27/2023 0:00
	Standard Methods 4500-P E 1999, 2011				09/27/2023 11:39
	SW-846 9036 (Total)				09/28/2023 1:06
	SW-846 9040B Field				09/26/2023 10:30
	SW-846 9214 (Total)				09/27/2023 9:13
	SW-846 9251 (Total)				09/28/2023 1:00
23091473-047B	G52D Duplicate	09/26/2023 10:30	09/26/2023 16:00		



## Dates Report

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/04/2023 12:17
	Standard Methods 2320 B (Dissolved) 1997, 2011				10/04/2023 12:17
	Standard Methods 4500-NO2 B (Dissolved) 2000, 2011				09/27/2023 16:54
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/27/2023 14:22
	Standard Methods 4500-NO3 F (Dissolved) 2000, 2011				09/27/2023 14:22
	Standard Methods 4500-P E (Dissolved) 1999, 2011				09/27/2023 11:40
	Standard Methods 4500-P E (Dissolved) 1999				09/27/2023 0:00
	SW-846 9036 (Dissolved)				09/28/2023 1:29
	SW-846 9251 (Dissolved)				09/28/2023 1:24
23091473-047C	G52D Duplicate	09/26/2023 10:30	09/26/2023 16:00		
	SW-846 3005A, 6010B, Metals by ICP (Total)			10/02/2023 19:04	10/03/2023 14:01
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			10/02/2023 19:04	10/04/2023 18:40
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			10/02/2023 19:04	10/09/2023 13:30
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			10/02/2023 19:04	10/10/2023 10:23
	SW-846 7470A (Total)			09/27/2023 11:50	09/29/2023 16:39
23091473-047D	G52D Duplicate	09/26/2023 10:30	09/26/2023 16:00		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			10/02/2023 9:08	10/02/2023 22:54
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 9:08	10/04/2023 0:46
	SW-846 3005A, 6020A, Metals by ICPMS (Dissolved)			10/02/2023 9:08	10/05/2023 13:48
23091473-047E	G52D Duplicate	09/26/2023 10:30	09/26/2023 16:00		
	SW-846 9060A				09/28/2023 17:53
23091473-047F	G52D Duplicate	09/26/2023 10:30	09/26/2023 16:00		
	SW-846 9060A				10/02/2023 12:59





## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### STANDARD METHODS 2510 B FIELD

Batch R337257		SampType: LCS		Units $\mu\text{S/cm}$							
SampID: LCS-1											
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	09/27/2023	

Batch R337257		SampType: LCS		Units $\mu\text{S/cm}$							
SampID: LCS-2											
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	09/26/2023	

Batch R337257		SampType: LCS		Units $\mu\text{S/cm}$							
SampID: LCS-3											
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	09/25/2023	

Batch R337257		SampType: LCS		Units $\mu\text{S/cm}$							
SampID: LCS-4											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Spec. Conductance, Field	*	0		1420	1412	0	100.2	90	110	09/27/2023	

Batch R337257		SampType: LCS		Units $\mu\text{S/cm}$							
SampID: LCS-5											
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	09/26/2023	

Batch R337257		SampType: LCS		Units $\mu\text{S/cm}$							
SampID: LCS-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	09/28/2023	

Batch R337257		SampType: LCS		Units $\mu\text{S/cm}$							
SampID: LCS-7											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Spec. Conductance, Field	*	0		1480	1412	0	104.8	90	110	09/29/2023	





## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### SW-846 9040B FIELD

Batch R337257		SampType: LCS		Units							
SampID: LCS-1											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
pH	*	1.00		7.04	7.000	0	100.6	98.57	101.4	09/27/2023	

Batch R337257		SampType: LCS		Units							
SampID: LCS-2											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
pH	*	1.00		7.04	7.000	0	100.6	98.57	101.4	09/26/2023	

Batch R337257		SampType: LCS		Units							
SampID: LCS-3											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
pH	*	1.00		7.06	7.000	0	100.9	98.57	101.4	09/25/2023	

Batch R337257		SampType: LCS		Units							
SampID: LCS-4											
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	09/27/2023	

Batch R337257		SampType: LCS		Units							
SampID: LCS-5											
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	09/26/2023	

Batch R337257		SampType: LCS		Units							
SampID: LCS-6											
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	09/28/2023	

Batch R337257		SampType: LCS		Units							
SampID: LCS-7											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
pH	*	1.00		7.04	7.000	0	100.6	98.57	101.4	09/29/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R337107		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	09/28/2023	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	09/28/2023	

Batch R337107		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Total Dissolved Solids		20		972	1000	0	97.2	90	110	09/28/2023	
Total Dissolved Solids		20		948	1000	0	94.8	90	110	09/28/2023	

Batch R337107		SampType: DUP		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-001ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Total Dissolved Solids		20		330				350.0	5.88	09/28/2023		

Batch R337236		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	10/02/2023	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/02/2023	

Batch R337236		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Total Dissolved Solids		20		970	1000	0	97.0	90	110	10/02/2023	
Total Dissolved Solids		20		978	1000	0	97.8	90	110	10/02/2023	

Batch R337236		SampType: DUP		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-012ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Total Dissolved Solids		20		262				266.0	1.52	10/02/2023		

Batch R337236		SampType: DUP		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-026ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Total Dissolved Solids		20		396				390.0	1.53	10/02/2023		



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R337238		SampType: MBLK		Units mg/L							Date Analyzed
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	09/29/2023	

Batch R337238		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Dissolved Solids		20		976	1000	0	97.6	90	110	09/29/2023	

Batch R337238		SampType: DUP		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-014ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Total Dissolved Solids		20		192				204.0	6.06	09/29/2023		

Batch R338047		SampType: MBLK		Units mg/L							Date Analyzed
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	10/19/2023	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/19/2023	

Batch R338047		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Dissolved Solids		20		962	1000	0	96.2	90	110	10/19/2023	
Total Dissolved Solids		20		950	1000	0	95.0	90	110	10/19/2023	

### STANDARD METHODS 4500-NO2 B (DISSOLVED) 2000, 2011

Batch R336898		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-001BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		0.47	0.5000	0	93.4	85	115	09/26/2023	

Batch R336898		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-001BMDS												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Nitrogen, Nitrite (as N)		0.05		0.51	0.5000	0	102.2	0.4670	9.00	09/26/2023		



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### STANDARD METHODS 4500-NO2 B (DISSOLVED) 2000, 2011

Batch R336898		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-002BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		<b>0.62</b>	0.5000	0.06700	111.4	85	115	09/26/2023	

Batch R336898		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-002BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Nitrogen, Nitrite (as N)		0.05		<b>0.58</b>	0.5000	0.06700	102.4	0.6240	7.48	09/26/2023		

Batch R336898		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-035BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		<b>0.51</b>	0.5000	0	102.0	85	115	09/26/2023	

Batch R336898		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-035BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Nitrogen, Nitrite (as N)		0.05		<b>0.51</b>	0.5000	0	102.4	0.5100	0.39	09/26/2023		

Batch R336962		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-004BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		<b>0.51</b>	0.5000	0	101.2	85	115	09/28/2023	

Batch R336962		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-004BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Nitrogen, Nitrite (as N)		0.05		<b>0.50</b>	0.5000	0	100.8	0.5060	0.40	09/28/2023		

### STANDARD METHODS 4500-NO2 B (TOTAL) 2000, 2011

Batch R336898		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		< <b>0.05</b>	0.0250	0	0	-100	100	09/26/2023	
Nitrogen, Nitrite (as N)		0.05		< <b>0.05</b>	0.0250	0	0	-100	100	09/26/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### STANDARD METHODS 4500-NO2 B (TOTAL) 2000, 2011

Batch R336898		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.25		1.20	1.250	0	95.6	90	110	09/26/2023	
Nitrogen, Nitrite (as N)		0.25		1.20	1.250	0	95.6	90	110	09/26/2023	

Batch R336962		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		< 0.05	0.0250	0	0	-100	100	09/27/2023	
Nitrogen, Nitrite (as N)		0.05		< 0.05	0.0250	0	0	-100	100	09/27/2023	

Batch R336962		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.25		1.24	1.250	0	98.8	90	110	09/27/2023	
Nitrogen, Nitrite (as N)		0.25		1.23	1.250	0	98.4	90	110	09/27/2023	

Batch R336962		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-004AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		0.50	0.5000	0	100.8	85	115	09/28/2023	

Batch R336962		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-004AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Nitrogen, Nitrite (as N)		0.05		0.51	0.5000	0	101.6	0.5040	0.79	09/28/2023		

Batch R336962		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-006AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		0.50	0.5000	0	99.6	85	115	09/28/2023	

Batch R336962		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-006AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Nitrogen, Nitrite (as N)		0.05		0.49	0.5000	0	98.6	0.4980	1.01	09/28/2023		



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### STANDARD METHODS 4500-NO2 B (TOTAL) 2000, 2011

Batch R336962		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-009AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		0.47	0.5000	0	94.6	85	115	09/28/2023	

Batch R336962		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-009AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Nitrogen, Nitrite (as N)		0.05		0.47	0.5000	0	94.6	0.4730	0.00	09/28/2023		

Batch R337118		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		< 0.05	0.0250	0	0	-100	100	09/29/2023	

Batch R337118		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.25		1.24	1.250	0	99.2	90	110	09/29/2023	

Batch R337118		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-025AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		0.50	0.5000	0	99.6	85	115	09/29/2023	

Batch R337118		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-025AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Nitrogen, Nitrite (as N)		0.05		0.51	0.5000	0	102.0	0.4980	2.38	09/29/2023		

Batch R337118		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-026AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrite (as N)		0.05		0.50	0.5000	0	100.8	85	115	09/29/2023	

Batch R337118		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-026AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Nitrogen, Nitrite (as N)		0.05		0.50	0.5000	0	100.4	0.5040	0.40	09/29/2023		



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### STANDARD METHODS 4500-NO3 F (DISSOLVED) 2000, 2011

Batch R336967		SampType: MS		Units mg/L							Date
SampID: 23091473-001BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Nitrogen, Nitrate-Nitrite (as N)		0.250	H	<b>3.95</b>	1.250	2.716	98.6	85	115		09/27/2023

Batch R336967		SampType: MSD		Units mg/L		RPD Limit: 10					Date
SampID: 23091473-001BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Nitrogen, Nitrate-Nitrite (as N)		0.250	H	<b>4.02</b>	1.250	2.716	104.3	3.948	1.81		09/27/2023

Batch R336967		SampType: MS		Units mg/L							Date
SampID: 23091473-036BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.249</b>	0.2500	0.01300	94.4	85	115		09/27/2023

Batch R336967		SampType: MSD		Units mg/L		RPD Limit: 10					Date
SampID: 23091473-036BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.247</b>	0.2500	0.01300	93.6	0.2490	0.81		09/27/2023

Batch R337069		SampType: MS		Units mg/L							Date
SampID: 23091473-008BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.219</b>	0.2500	0	87.6	85	115		09/28/2023

Batch R337069		SampType: MSD		Units mg/L		RPD Limit: 10					Date
SampID: 23091473-008BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.226</b>	0.2500	0	90.4	0.2190	3.15		09/28/2023

Batch R337069		SampType: MS		Units mg/L							Date
SampID: 23091473-023BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.265</b>	0.2500	0.01500	100.0	85	115		09/28/2023

Batch R337069		SampType: MSD		Units mg/L		RPD Limit: 10					Date
SampID: 23091473-023BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.266</b>	0.2500	0.01500	100.4	0.2650	0.38		09/28/2023





## Quality Control Results

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

Client: Ramboll  
Client Project: JOP-23Q3

Work Order: 23091473  
Report Date: 16-Nov-23

### STANDARD METHODS 4500-NO3 F (DISSOLVED) 2000, 2011

Batch R337069		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-037BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.246</b>	0.2500	0	98.4	85	115	09/28/2023	

Batch R337069		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-037BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.247</b>	0.2500	0	98.8	0.2460	0.41	09/28/2023		

Batch R337205		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-021BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.500		<b>7.52</b>	2.500	5.092	97.1	85	115	09/29/2023	

Batch R337205		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-021BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Nitrogen, Nitrate-Nitrite (as N)		0.500		<b>7.41</b>	2.500	5.092	92.6	7.520	1.53	09/29/2023		

### STANDARD METHODS 4500-NO3 F (TOTAL) 2000, 2011

Batch R336967		SampType: MBLK		Units mg/L							Date Analyzed
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate (as N)		0.050		<b>&lt; 0.050</b>						09/27/2023	
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>&lt; 0.050</b>	0.0090	0	0	-100	100	09/27/2023	

Batch R336967		SampType: LCS		Units mg/L							Date Analyzed
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.507</b>	0.5000	0	101.4	90	110	09/27/2023	

Batch R336967		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-003AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.250		<b>4.23</b>	1.250	2.874	108.4	85	115	09/27/2023	





## Quality Control Results

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

Client: Ramboll  
Client Project: JOP-23Q3

Work Order: 23091473  
Report Date: 16-Nov-23

### STANDARD METHODS 4500-NO3 F (TOTAL) 2000, 2011

Batch R336967		SampType: MSD		Units mg/L				RPD Limit: 10			Date Analyzed
SampID: 23091473-003AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.250		<b>4.24</b>	1.250	2.874	109.0	4.229	0.19	09/27/2023	

Batch R336967		SampType: MS		Units mg/L				RPD Limit: 10			Date Analyzed
SampID: 23091473-044AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.284</b>	0.2500	0.02400	104.0	85	115	09/27/2023	

Batch R336967		SampType: MSD		Units mg/L				RPD Limit: 10			Date Analyzed
SampID: 23091473-044AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.286</b>	0.2500	0.02400	104.8	0.2840	0.70	09/27/2023	

Batch R337069		SampType: MBLK		Units mg/L				RPD Limit: 10			Date Analyzed
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate (as N)		0.050		< <b>0.050</b>						09/28/2023	
Nitrogen, Nitrate-Nitrite (as N)		0.050		< <b>0.050</b>	0.0090	0	0	-100	100	09/28/2023	

Batch R337069		SampType: LCS		Units mg/L				RPD Limit: 10			Date Analyzed
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.516</b>	0.5000	0	103.2	90	110	09/28/2023	

Batch R337069		SampType: MS		Units mg/L				RPD Limit: 10			Date Analyzed
SampID: 23091473-022AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.300</b>	0.2500	0.08300	86.8	85	115	09/28/2023	

Batch R337069		SampType: MSD		Units mg/L				RPD Limit: 10			Date Analyzed
SampID: 23091473-022AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.050		<b>0.329</b>	0.2500	0.08300	98.4	0.3000	9.22	09/28/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### STANDARD METHODS 4500-NO3 F (TOTAL) 2000, 2011

Batch R337069		SampType: MS		Units mg/L							
SampID: 23091473-033AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.250	S	3.74	1.250	2.263	117.8	85	115	09/28/2023	

Batch R337069		SampType: MSD		Units mg/L							
SampID: 23091473-033AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.250		3.57	1.250	2.263	104.7	3.735	4.46	09/28/2023	

Batch R337205		SampType: MBLK		Units mg/L							
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate (as N)		0.050		< 0.050						09/29/2023	
Nitrogen, Nitrate-Nitrite (as N)		0.050		< 0.050	0.0090	0	0	-100	100	09/29/2023	

Batch R337205		SampType: LCS		Units mg/L							
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.050		0.522	0.5000	0	104.4	90	110	09/29/2023	

Batch R337205		SampType: MS		Units mg/L							
SampID: 23091473-017AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.100		1.30	0.5000	0.7940	101.0	85	115	09/29/2023	

Batch R337205		SampType: MSD		Units mg/L							
SampID: 23091473-017AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.100		1.30	0.5000	0.7940	100.6	1.299	0.15	09/29/2023	

Batch R337205		SampType: MS		Units mg/L							
SampID: 23091473-032AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.250		3.60	1.250	2.305	103.6	85	115	09/29/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### STANDARD METHODS 4500-NO3 F (TOTAL) 2000, 2011

Batch	R337205	SampType:	MSD	Units	mg/L	RPD Limit: 10					Date
SampID: 23091473-032AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Nitrogen, Nitrate-Nitrite (as N)		0.250		<b>3.65</b>	1.250	2.305	107.5	3.600	1.35	09/29/2023	

### STANDARD METHODS 4500-P E (DISSOLVED) 1999, 2011

Batch	R336947	SampType:	MS	Units	mg/L	RPD Limit: 10					Date
SampID: 23091473-002BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)		0.010		<b>0.052</b>	0.0500	0	104.0	85	115	09/27/2023	

Batch	R336947	SampType:	MSD	Units	mg/L	RPD Limit: 10					Date
SampID: 23091473-002BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Phosphorus, Orthophosphate (as P)		0.010		<b>0.053</b>	0.0500	0	106.0	0.05200	1.90	09/27/2023	

Batch	R336947	SampType:	MS	Units	mg/L	RPD Limit: 10					Date
SampID: 23091473-036BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)		0.010		<b>0.121</b>	0.0500	0.07000	102.0	85	115	09/27/2023	

Batch	R336947	SampType:	MSD	Units	mg/L	RPD Limit: 10					Date
SampID: 23091473-036BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Phosphorus, Orthophosphate (as P)		0.010		<b>0.116</b>	0.0500	0.07000	92.0	0.1210	4.22	09/27/2023	

Batch	R337056	SampType:	MS	Units	mg/L	RPD Limit: 10					Date
SampID: 23091473-004BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)		0.010		<b>0.045</b>	0.0500	0	90.0	85	115	09/28/2023	

Batch	R337056	SampType:	MSD	Units	mg/L	RPD Limit: 10					Date
SampID: 23091473-004BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Phosphorus, Orthophosphate (as P)		0.010		<b>0.044</b>	0.0500	0	88.0	0.04500	2.25	09/28/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### STANDARD METHODS 4500-P E (DISSOLVED) 1999, 2011

Batch R337056		SampType: MS		Units mg/L							Date
SampID: 23091473-005BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Phosphorus, Orthophosphate (as P)		0.010		<b>0.061</b>	0.0500	0.01800	86.0	85	115		09/28/2023

Batch R337056		SampType: MSD		Units mg/L		RPD Limit: 10					Date
SampID: 23091473-005BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Phosphorus, Orthophosphate (as P)		0.010		<b>0.063</b>	0.0500	0.01800	90.0	0.06100	3.23		09/28/2023

Batch R337056		SampType: MS		Units mg/L							Date
SampID: 23091473-007BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Phosphorus, Orthophosphate (as P)		0.010		<b>0.057</b>	0.0500	0.01100	92.0	85	115		09/28/2023

Batch R337056		SampType: MSD		Units mg/L		RPD Limit: 10					Date
SampID: 23091473-007BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Phosphorus, Orthophosphate (as P)		0.010		<b>0.060</b>	0.0500	0.01100	98.0	0.05700	5.13		09/28/2023

Batch R337056		SampType: MS		Units mg/L							Date
SampID: 23091473-009BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Phosphorus, Orthophosphate (as P)		0.010		<b>0.067</b>	0.0500	0.02000	94.0	85	115		09/28/2023

Batch R337056		SampType: MSD		Units mg/L		RPD Limit: 10					Date
SampID: 23091473-009BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Phosphorus, Orthophosphate (as P)		0.010		<b>0.068</b>	0.0500	0.02000	96.0	0.06700	1.48		09/28/2023

Batch R337073		SampType: MS		Units mg/L							Date
SampID: 23091473-017BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Phosphorus, Orthophosphate (as P)		0.010		<b>0.065</b>	0.0500	0.01700	96.0	85	115		09/29/2023

Batch R337073		SampType: MSD		Units mg/L		RPD Limit: 10					Date
SampID: 23091473-017BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Phosphorus, Orthophosphate (as P)		0.010		<b>0.066</b>	0.0500	0.01700	98.0	0.06500	1.53		09/29/2023



## Quality Control Results

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

Client: Ramboll  
Client Project: JOP-23Q3

Work Order: 23091473  
Report Date: 16-Nov-23

### STANDARD METHODS 4500-P E (DISSOLVED) 1999, 2011

Batch R337073		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-018BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)		0.010		<b>0.068</b>	0.0500	0.01300	110.0	85	115	09/29/2023	

Batch R337073		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-018BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Phosphorus, Orthophosphate (as P)		0.010		<b>0.068</b>	0.0500	0.01300	110.0	0.06800	0.00	09/29/2023		

### STANDARD METHODS 4500-P E 1999, 2011

Batch R336947		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)		0.010		< <b>0.010</b>	0.0020	0	0	-100	100	09/27/2023	

Batch R336947		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)		0.010		<b>0.102</b>	0.1000	0	102.0	90	110	09/27/2023	

Batch R336947		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-002AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)		0.010		<b>0.052</b>	0.0500	0.005000	94.0	85	115	09/27/2023	

Batch R336947		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-002AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Phosphorus, Orthophosphate (as P)		0.010		<b>0.052</b>	0.0500	0.005000	94.0	0.05200	0.00	09/27/2023		

Batch R337056		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)		0.010		< <b>0.010</b>	0.0020	0	0	-100	100	09/28/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### STANDARD METHODS 4500-P E 1999, 2011

Batch R337056		SampType: LCS		Units mg/L							
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)		0.010		<b>0.105</b>	0.1000	0	105.0	90	110	09/28/2023	

Batch R337073		SampType: MBLK		Units mg/L							
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)		0.010		<b>&lt; 0.010</b>	0.0020	0	0	-100	100	09/29/2023	

Batch R337073		SampType: LCS		Units mg/L							
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Phosphorus, Orthophosphate (as P)		0.010		<b>0.098</b>	0.1000	0	98.0	90	110	09/29/2023	

### SW-846 9036 (DISSOLVED)

Batch R337008		SampType: MBLK		Units mg/L							
SampID: MB-R337008											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		<b>&lt; 10</b>	6.140	0	0	-100	100	09/27/2023	

Batch R337008		SampType: LCS		Units mg/L							
SampID: LCS-R337008											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		<b>19</b>	20.00	0	93.6	90	110	09/27/2023	

Batch R337008		SampType: MS		Units mg/L							
SampID: 23091473-035BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		100	S	<b>289</b>	200.0	124.6	82.3	85	115	09/27/2023	

Batch R337008		SampType: MSD		Units mg/L							
SampID: 23091473-035BMMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		100		<b>296</b>	200.0	124.6	85.5	289.1	2.20	09/27/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### SW-846 9036 (DISSOLVED)

Batch R337008		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-038BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		100		<b>360</b>	200.0	178.3	90.7	85	115	09/27/2023	

Batch R337008		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-038BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Sulfate		100		<b>363</b>	200.0	178.3	92.6	359.6	1.03	09/27/2023		

Batch R337145		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MB-R337145											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10	J	<b>6</b>	6.280	0	100.0	-100	100	09/29/2023	

Batch R337145		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-R337145											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		<b>19</b>	20.00	0	92.8	90	110	09/29/2023	

Batch R337255		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-006BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		100		<b>472</b>	200.0	267.2	102.3	85	115	10/03/2023	

Batch R337255		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-006BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Sulfate		100		<b>450</b>	200.0	267.2	91.4	471.8	4.74	10/03/2023		

Batch R337255		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-022BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		50	S	<b>158</b>	100.0	74.07	83.7	85	115	10/03/2023	

Batch R337255		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-022BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Sulfate		50		<b>159</b>	100.0	74.07	85.2	157.8	0.99	10/03/2023		





## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### SW-846 9036 (DISSOLVED)

Batch R337255		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-025BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10	SE	52	20.00	35.09	83.7	85	115	10/03/2023	

Batch R337255		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-025BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Sulfate		10	E	53	20.00	35.09	87.4	51.83	1.42	10/03/2023		

Batch R337324		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-019BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		50	S	167	100.0	159.3	7.5	85	115	10/04/2023	

Batch R337324		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-019BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Sulfate		50	S	168	100.0	159.3	8.4	166.8	0.54	10/04/2023		

### SW-846 9036 (TOTAL)

Batch R337008		SampType: MBLK		Units mg/L							Date Analyzed
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	09/27/2023	

Batch R337008		SampType: LCS		Units mg/L							Date Analyzed
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	93.6	90	110	09/27/2023	

Batch R337008		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-035AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		100	S	489	200.0	127.1	181.0	85	115	09/27/2023	





## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### SW-846 9036 (TOTAL)

Batch R337008		SampType: MSD		Units mg/L				RPD Limit: 10			
SampID: 23091473-035AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		100	SR	120	200.0	127.1	-3.3	489.0	120.93	09/27/2023	

Batch R337008		SampType: MS		Units mg/L							
SampID: 23091473-038AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		100		354	200.0	179.5	87.1	85	115	09/27/2023	

Batch R337008		SampType: MSD		Units mg/L				RPD Limit: 10			
SampID: 23091473-038AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		100		360	200.0	179.5	90.1	353.8	1.65	09/27/2023	

Batch R337145		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	J	6	6.280	0	100.0	-100	100	09/29/2023	

Batch R337145		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	92.8	90	110	09/29/2023	

Batch R337255		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	10/03/2023	

Batch R337255		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	93.4	90	110	10/03/2023	

Batch R337255		SampType: MS		Units mg/L							
SampID: 23091473-006AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		100		452	200.0	268.3	91.8	85	115	10/03/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### SW-846 9036 (TOTAL)

Batch R337255		SampType: MSD		Units mg/L				RPD Limit: 10			
SampID: 23091473-006AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		100		447	200.0	268.3	89.2	451.9	1.19	10/03/2023	

Batch R337255		SampType: MS		Units mg/L				RPD Limit: 10			
SampID: 23091473-018AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		100		351	200.0	179.4	86.0	85	115	10/04/2023	

Batch R337255		SampType: MSD		Units mg/L				RPD Limit: 10			
SampID: 23091473-018AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		100		357	200.0	179.4	89.0	351.3	1.70	10/04/2023	

Batch R337255		SampType: MS		Units mg/L				RPD Limit: 10			
SampID: 23091473-030AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		100		465	200.0	280.7	92.0	85	115	10/04/2023	

Batch R337255		SampType: MSD		Units mg/L				RPD Limit: 10			
SampID: 23091473-030AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		100		466	200.0	280.7	92.6	464.7	0.25	10/04/2023	

Batch R337324		SampType: MBLK		Units mg/L				RPD Limit: 10			
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	10/04/2023	

Batch R337324		SampType: LCS		Units mg/L				RPD Limit: 10			
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	95.3	90	110	10/04/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### SW-846 9060A

Batch R337063		SampType: MBLK		Units mg/L						
SampID: Filter Blank										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Dissolved Organic Carbon		1.0		< 1.0	0.4500	0	0	-100	100	09/28/2023

Batch R337063		SampType: MBLK		Units mg/L						
SampID: ICB/MBLK										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Organic Carbon (TOC)		1.0		< 1.0	0.4500	0	0	-100	100	09/28/2023

Batch R337063		SampType: LCS		Units mg/L						
SampID: ICV/LCS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Organic Carbon (TOC)		1.0		4.9	5.000	0	98.6	90	110	09/28/2023

Batch R337063		SampType: MS		Units mg/L						
SampID: 23091473-001EMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Organic Carbon (TOC)		1.0		5.9	5.000	0.8100	101.8	85	115	09/28/2023

Batch R337063		SampType: MSD		Units mg/L							RPD Limit: 10
SampID: 23091473-001EMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Total Organic Carbon (TOC)		1.0		5.9	5.000	0.8100	102.4	5.900	0.51	09/28/2023	

Batch R337063		SampType: MS		Units mg/L						
SampID: 23091473-015FMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Dissolved Organic Carbon		1.0		8.7	5.000	3.280	108.2	85	115	09/28/2023

Batch R337063		SampType: MSD		Units mg/L							RPD Limit: 10
SampID: 23091473-015FMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Dissolved Organic Carbon		1.0		8.6	5.000	3.280	105.4	8.690	1.62	09/28/2023	

Batch R337063		SampType: MS		Units mg/L						
SampID: 23091473-035EMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Organic Carbon (TOC)		1.0		5.8	5.000	0.7300	100.8	85	115	09/28/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### SW-846 9060A

Batch R337063		SampType: MSD		Units mg/L			RPD Limit: 10			
SampID: 23091473-035EMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Organic Carbon (TOC)		1.0		5.8	5.000	0.7300	102.0	5.770	1.03	09/28/2023

Batch R337063		SampType: MS		Units mg/L						
SampID: 23091473-043EMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Organic Carbon (TOC)		1.0		9.1	5.000	4.360	94.0	85	115	09/28/2023

Batch R337063		SampType: MSD		Units mg/L			RPD Limit: 10			
SampID: 23091473-043EMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Organic Carbon (TOC)		1.0		9.0	5.000	4.360	93.4	9.060	0.33	09/28/2023

Batch R337210		SampType: MBLK		Units mg/L						
SampID: Filter Blank										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Dissolved Organic Carbon		1.0		< 1.0	0.4500	0	0	-100	100	10/02/2023

Batch R337210		SampType: MBLK		Units mg/L						
SampID: ICB/MBLK										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Organic Carbon (TOC)		1.0		< 1.0	0.4500	0	0	-100	100	10/02/2023

Batch R337210		SampType: LCS		Units mg/L						
SampID: ICV/LCS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Organic Carbon (TOC)		1.0		5.0	5.000	0	100.2	90	110	10/02/2023

Batch R337210		SampType: MS		Units mg/L						
SampID: 23091473-004EMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Organic Carbon (TOC)		1.0		8.0	5.000	2.930	100.6	85	115	10/02/2023

Batch R337210		SampType: MSD		Units mg/L			RPD Limit: 10			
SampID: 23091473-004EMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Organic Carbon (TOC)		1.0		7.9	5.000	2.930	99.2	7.960	0.88	10/02/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### SW-846 9060A

Batch R337210		SampType: MS		Units mg/L							Date
SampID: 23091473-019EMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Total Organic Carbon (TOC)		1.0		5.6	5.000	0.4800	101.4	85	115		10/02/2023

Batch R337210		SampType: MSD		Units mg/L		RPD Limit: 10					Date
SampID: 23091473-019EMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Total Organic Carbon (TOC)		1.0		5.4	5.000	0.4800	99.2	5.550	2.00		10/02/2023

Batch R337210		SampType: MS		Units mg/L							Date
SampID: 23091473-020FMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Dissolved Organic Carbon		1.0		6.0	5.000	1.040	98.8	85	115		10/02/2023

Batch R337210		SampType: MSD		Units mg/L		RPD Limit: 10					Date
SampID: 23091473-020FMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Dissolved Organic Carbon		1.0		6.0	5.000	1.040	100.0	5.980	1.00		10/02/2023

Batch R337210		SampType: MS		Units mg/L							Date
SampID: 23091473-023EMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Total Organic Carbon (TOC)		1.0		6.2	5.000	1.300	98.8	85	115		10/02/2023

Batch R337210		SampType: MSD		Units mg/L		RPD Limit: 10					Date
SampID: 23091473-023EMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Total Organic Carbon (TOC)		1.0		6.2	5.000	1.300	97.8	6.240	0.80		10/02/2023

Batch R337210		SampType: MS		Units mg/L							Date
SampID: 23091473-030EMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Total Organic Carbon (TOC)		1.0		5.8	5.000	0.5900	104.4	85	115		10/02/2023

Batch R337210		SampType: MSD		Units mg/L		RPD Limit: 10					Date
SampID: 23091473-030EMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Total Organic Carbon (TOC)		1.0		5.7	5.000	0.5900	102.2	5.810	1.91		10/02/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### SW-846 9060A

Batch R337210		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-030FMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Dissolved Organic Carbon		1.0		6.1	5.000	1.070	100.2	85	115	10/02/2023	

Batch R337210		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 23091473-030FMMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Dissolved Organic Carbon		1.0		6.0	5.000	1.070	99.0	6.080	0.99	10/02/2023		

### SW-846 9214 (TOTAL)

Batch R336932		SampType: MBLK		Units mg/L							Date Analyzed
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	09/27/2023	

Batch R336932		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		1.02	1.000	0	101.6	90	110	09/27/2023	

Batch R336932		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-040AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.36	2.000	0.2480	105.8	75	125	09/27/2023	

Batch R336932		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23091473-040AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Fluoride		0.10		2.36	2.000	0.2480	105.8	2.365	0.00	09/27/2023		

Batch R336932		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-047AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.33	2.000	0.2730	102.8	75	125	09/27/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### SW-846 9214 (TOTAL)

Batch R336932		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 23091473-047AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		<b>2.33</b>	2.000	0.2730	102.6	2.328	0.09	09/27/2023	

Batch R337213		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	10/03/2023	

Batch R337213		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		<b>1.00</b>	1.000	0	99.6	90	110	10/03/2023	

Batch R337213		SampType: MS		Units mg/L							
SampID: 23091473-011AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		<b>2.20</b>	2.000	0.2010	100.1	75	125	10/03/2023	

Batch R337213		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 23091473-011AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		<b>2.23</b>	2.000	0.2010	101.5	2.203	1.22	10/03/2023	

Batch R337213		SampType: MS		Units mg/L							
SampID: 23091473-028AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		<b>2.52</b>	2.000	0.3400	109.0	75	125	10/03/2023	

Batch R337213		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 23091473-028AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		<b>2.56</b>	2.000	0.3400	110.8	2.521	1.42	10/03/2023	

Batch R337213		SampType: MS		Units mg/L							
SampID: 23091473-029AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		<b>2.73</b>	2.000	0.3860	117.1	75	125	10/03/2023	





## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### SW-846 9214 (TOTAL)

Batch R337213		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 23091473-029AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.63	2.000	0.3860	112.4	2.728	3.54	10/03/2023	

Batch R337213		SampType: MS		Units mg/L				RPD Limit: 15			
SampID: 23091473-046AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.15	2.000	0	107.4	75	125	10/03/2023	

Batch R337213		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 23091473-046AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.18	2.000	0	109.2	2.148	1.71	10/03/2023	

Batch R337213		SampType: MS		Units mg/L				RPD Limit: 15			
SampID: 23091473-048AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.42	2.000	0.2820	106.9	75	125	10/03/2023	

Batch R337213		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 23091473-048AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.38	2.000	0.2820	104.8	2.420	1.71	10/03/2023	

### SW-846 9251 (DISSOLVED)

Batch R337023		SampType: MS		Units mg/L				RPD Limit: 15			
SampID: 23091473-035BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		25	20.00	3.760	107.0	85	115	09/27/2023	

Batch R337023		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 23091473-035BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		24	20.00	3.760	102.4	25.17	3.81	09/27/2023	





## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### SW-846 9251 (DISSOLVED)

Batch R337023		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-038BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		39	20.00	19.98	93.2	85	115	09/27/2023	

Batch R337023		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23091473-038BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Chloride		4		39	20.00	19.98	95.2	38.62	1.06	09/27/2023		

Batch R337287		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-006BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		38	20.00	20.49	87.8	85	115	10/03/2023	

Batch R337287		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23091473-006BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Chloride		4		39	20.00	20.49	91.6	38.05	1.98	10/03/2023		

Batch R337287		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-019BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		37	20.00	18.98	89.4	85	115	10/03/2023	

Batch R337287		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23091473-019BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Chloride		4		37	20.00	18.98	88.0	36.85	0.76	10/03/2023		

Batch R337287		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-022BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		40	20.00	22.06	88.0	85	115	10/03/2023	

Batch R337287		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23091473-022BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Chloride		4		40	20.00	22.06	87.6	39.67	0.20	10/03/2023		



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### SW-846 9251 (DISSOLVED)

Batch R337287		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-025BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		42	20.00	25.42	85.1	85	115	10/03/2023	

Batch R337287		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23091473-025BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Chloride		4		43	20.00	25.42	87.5	42.44	1.10	10/03/2023		

### SW-846 9251 (TOTAL)

Batch R337023		SampType: MBLK		Units mg/L							Date Analyzed
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	09/27/2023	

Batch R337023		SampType: LCS		Units mg/L							Date Analyzed
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	99.6	90	110	09/27/2023	

Batch R337023		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-035AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		24	20.00	3.980	100.2	85	115	09/27/2023	

Batch R337023		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23091473-035AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Chloride		4		24	20.00	3.980	98.1	24.03	1.81	09/27/2023		

Batch R337023		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-038AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		39	20.00	20.03	96.3	85	115	09/27/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### SW-846 9251 (TOTAL)

Batch R337023		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 23091473-038AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		39	20.00	20.03	95.7	39.29	0.33	09/27/2023	

Batch R337157		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	09/29/2023	

Batch R337157		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	09/29/2023	

Batch R337287		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	10/03/2023	

Batch R337287		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	99.4	90	110	10/03/2023	

Batch R337287		SampType: MS		Units mg/L							
SampID: 23091473-006AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		38	20.00	20.78	87.2	85	115	10/03/2023	

Batch R337287		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 23091473-006AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		39	20.00	20.78	89.7	38.21	1.33	10/03/2023	

Batch R337287		SampType: MS		Units mg/L							
SampID: 23091473-018AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		40	20.00	22.30	89.8	85	115	10/04/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### SW-846 9251 (TOTAL)

Batch R337287		SampType: MSD		Units mg/L			RPD Limit: 15			
SampID: 23091473-018AMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		41	20.00	22.30	91.1	40.27	0.62	10/04/2023

Batch R337287		SampType: MS		Units mg/L						
SampID: 23091473-030AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		37	20.00	19.01	88.0	85	115	10/04/2023

Batch R337287		SampType: MSD		Units mg/L			RPD Limit: 15			
SampID: 23091473-030AMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		37	20.00	19.01	88.6	36.61	0.33	10/04/2023

Batch R337334		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	10/04/2023

Batch R337334		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	100.3	90	110	10/04/2023

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

Batch 212672		SampType: MBLK		Units mg/L						
SampID: MBLK-212672										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		< 0.0250	0.0127	0	0	-100	100	10/02/2023
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	10/02/2023
Iron		0.0400		< 0.0400	0.0200	0	0	-100	100	10/02/2023
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	10/02/2023
Manganese		0.0070		< 0.0070	0.0025	0	0	-100	100	10/02/2023
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	10/02/2023
Silicon	*	0.0500		< 0.0500	0.0122	0	0	-100	100	10/02/2023
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	10/02/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212672 SampType: LCS Units mg/L  
SampID: LCS-212672

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		<b>2.33</b>	2.500	0	93.3	85	115	10/02/2023
Iron		0.0400		<b>1.77</b>	2.000	0	88.7	85	115	10/02/2023
Magnesium		0.0500		<b>2.35</b>	2.500	0	94.1	85	115	10/03/2023
Manganese		0.0070		<b>0.436</b>	0.5000	0	87.2	85	115	10/02/2023
Potassium		0.100		<b>2.30</b>	2.500	0	92.2	85	115	10/02/2023
Silicon	*	0.0500		<b>0.500</b>	0.5000	0	99.9	85	115	10/03/2023
Sodium		0.0500		<b>2.16</b>	2.500	0	86.6	85	115	10/02/2023

Batch 212672 SampType: MS Units mg/L  
SampID: 23091473-022DMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	<b>29.9</b>	2.500	29.47	15.6	75	125	10/02/2023
Magnesium		0.0500	S	<b>14.6</b>	2.500	13.21	53.8	75	125	10/02/2023
Potassium		0.100		<b>2.67</b>	2.500	0.1971	98.8	75	125	10/02/2023
Silicon	*	0.0500	S	<b>17.8</b>	0.5000	18.31	-100.5	75	125	10/02/2023
Sodium		0.0500	S	<b>60.5</b>	2.500	60.96	-18.0	75	125	10/02/2023

Batch 212672 SampType: MSD Units mg/L  
SampID: 23091473-022DMSD

RPD Limit: 20

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100	S	<b>29.9</b>	2.500	29.47	17.6	29.86	0.17	10/02/2023
Magnesium		0.0500	S	<b>14.6</b>	2.500	13.21	54.5	14.56	0.11	10/02/2023
Potassium		0.100		<b>2.70</b>	2.500	0.1971	100.1	2.667	1.17	10/02/2023
Silicon	*	0.0500	S	<b>17.8</b>	0.5000	18.31	-99.5	17.81	0.03	10/02/2023
Sodium		0.0500	S	<b>60.5</b>	2.500	60.96	-18.4	60.51	0.02	10/02/2023

Batch 212672 SampType: MS Units mg/L  
SampID: 23091473-023DMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	<b>132</b>	2.500	132.4	-3.2	75	125	10/02/2023
Magnesium		0.0500	S	<b>24.1</b>	2.500	22.45	65.8	75	125	10/02/2023
Potassium		0.100		<b>5.60</b>	2.500	3.288	92.5	75	125	10/02/2023
Silicon	*	0.0500	S	<b>7.16</b>	0.5000	6.829	65.3	75	125	10/02/2023
Sodium		0.0500	S	<b>34.0</b>	2.500	32.48	62.4	75	125	10/02/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212672		SampType: MSD		Units mg/L				RPD Limit: 20			
SampID: 23091473-023DMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100	S	130	2.500	132.4	-78.8	132.3	1.44	10/02/2023	
Magnesium		0.0500	S	23.9	2.500	22.45	56.7	24.09	0.95	10/02/2023	
Potassium		0.100		5.58	2.500	3.288	91.6	5.600	0.37	10/02/2023	
Silicon	*	0.0500	S	7.06	0.5000	6.829	45.4	7.155	1.40	10/02/2023	
Sodium		0.0500	S	33.7	2.500	32.48	48.0	34.04	1.06	10/02/2023	

Batch 212674		SampType: MBLK		Units mg/L							
SampID: MBLK-212674											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Aluminum		0.0250		< 0.0250	0.0127	0	0	-100	100	10/02/2023	
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	10/02/2023	
Iron		0.0400		< 0.0400	0.0200	0	0	-100	100	10/02/2023	
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	10/02/2023	
Manganese		0.0070		< 0.0070	0.0025	0	0	-100	100	10/02/2023	
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	10/02/2023	
Silicon	*	0.0500		< 0.0500	0.0122	0	0	-100	100	10/02/2023	
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	10/02/2023	

Batch 212674		SampType: LCS		Units mg/L							
SampID: LCS-212674											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Aluminum		0.0250		1.79	2.000	0	89.6	85	115	10/02/2023	
Calcium		0.100		2.46	2.500	0	98.5	85	115	10/02/2023	
Iron		0.0400		1.88	2.000	0	94.2	85	115	10/02/2023	
Magnesium		0.0500		2.21	2.500	0	88.3	85	115	10/02/2023	
Manganese		0.0070		0.462	0.5000	0	92.3	85	115	10/02/2023	
Potassium		0.100		2.42	2.500	0	96.8	85	115	10/02/2023	
Silicon	*	0.0500		0.485	0.5000	0	97.0	85	115	10/03/2023	
Sodium		0.0500		2.28	2.500	0	91.3	85	115	10/02/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212674 SampType: MS Units mg/L

SampleID: 23091473-029DMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	97.5	2.500	97.60	-3.2	75	125	10/02/2023
Magnesium		0.0500	S	25.0	2.500	23.38	66.6	75	125	10/02/2023
Potassium		0.100		3.97	2.500	1.506	98.6	75	125	10/02/2023
Silicon	*	0.0500	S	6.25	0.5000	5.921	66.4	75	125	10/02/2023
Sodium		0.0500	S	33.5	2.500	32.34	48.0	75	125	10/02/2023

Batch 212674 SampType: MSD Units mg/L

RPD Limit: 20

SampleID: 23091473-029DMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100	S	96.2	2.500	97.60	-56.0	97.52	1.36	10/02/2023
Magnesium		0.0500	S	24.8	2.500	23.38	56.5	25.05	1.01	10/02/2023
Potassium		0.100		4.02	2.500	1.506	100.4	3.970	1.12	10/02/2023
Silicon	*	0.0500	S	6.16	0.5000	5.921	47.9	6.253	1.49	10/02/2023
Sodium		0.0500	S	33.2	2.500	32.34	34.8	33.54	0.99	10/02/2023

Batch 212674 SampType: MS Units mg/L

SampleID: 23091473-037DMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	36.5	2.500	35.15	55.6	75	125	10/02/2023
Magnesium		0.0500	S	17.0	2.500	15.31	66.5	75	125	10/02/2023
Potassium		0.100		2.73	2.500	0.2692	98.4	75	125	10/02/2023
Silicon	*	0.0500	S	18.2	0.5000	18.32	-22.3	75	125	10/02/2023
Sodium		0.0500	S	46.4	2.500	45.84	21.6	75	125	10/02/2023

Batch 212674 SampType: MSD Units mg/L

RPD Limit: 20

SampleID: 23091473-037DMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100	S	36.4	2.500	35.15	50.0	36.54	0.38	10/02/2023
Magnesium		0.0500	S	16.9	2.500	15.31	64.2	16.97	0.33	10/02/2023
Potassium		0.100		2.81	2.500	0.2692	101.8	2.730	3.06	10/02/2023
Silicon	*	0.0500	S	18.2	0.5000	18.32	-25.8	18.21	0.10	10/02/2023
Sodium		0.0500	S	46.6	2.500	45.84	30.0	46.38	0.45	10/02/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212689 SampType: MBLK Units mg/L

SampID: MBLK-212689

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		< 0.0250	0.0127	0	0	-100	100	10/02/2023
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	10/02/2023
Iron		0.0400		< 0.0400	0.0200	0	0	-100	100	10/02/2023
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	10/02/2023
Manganese		0.0070		< 0.0070	0.0025	0	0	-100	100	10/02/2023
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	10/02/2023
Silicon	*	0.0500		< 0.0500	0.0122	0	0	-100	100	10/02/2023
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	10/02/2023

Batch 212689 SampType: LCS Units mg/L

SampID: LCS-212689

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		1.78	2.000	0	88.8	85	115	10/02/2023
Calcium		0.100		2.47	2.500	0	98.9	85	115	10/02/2023
Iron		0.0400		1.89	2.000	0	94.6	85	115	10/02/2023
Magnesium		0.0500		2.22	2.500	0	88.8	85	115	10/02/2023
Manganese		0.0070		0.464	0.5000	0	92.9	85	115	10/02/2023
Potassium		0.100		2.42	2.500	0	96.9	85	115	10/02/2023
Silicon	*	0.0500		0.474	0.5000	0	94.7	85	115	10/03/2023
Sodium		0.0500		2.28	2.500	0	91.1	85	115	10/02/2023

Batch 212689 SampType: MS Units mg/L

SampID: 23091473-044DMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		13.4	2.500	10.96	98.4	75	125	10/02/2023
Magnesium		0.0500		2.37	2.500	0.03270	93.3	75	125	10/02/2023
Potassium		1.00		27.4	2.500	25.38	82.4	75	125	10/03/2023
Silicon	*	0.0500		5.56	0.5000	5.130	86.1	75	125	10/02/2023
Sodium		0.0500	S	99.1	2.500	97.76	53.6	75	125	10/02/2023





## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212689		SampType: MSD		Units mg/L				RPD Limit: 20			Date Analyzed
SampID: 23091473-044DMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100		<b>13.5</b>	2.500	10.96	100.0	13.42	0.30	10/02/2023	
Magnesium		0.0500		<b>2.39</b>	2.500	0.03270	94.1	2.366	0.85	10/02/2023	
Potassium		1.00	S	<b>26.7</b>	2.500	25.38	53.6	27.44	2.67	10/03/2023	
Silicon	*	0.0500		<b>5.60</b>	0.5000	5.130	93.5	5.560	0.67	10/02/2023	
Sodium		0.0500		<b>99.9</b>	2.500	97.76	84.8	99.10	0.78	10/02/2023	

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

Batch 212544		SampType: MBLK		Units mg/L				RPD Limit: 20		Date Analyzed
SampID: MBLK-212544										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		< <b>0.100</b>	0.0350	0	0	-100	100	09/28/2023
Magnesium		0.0500		< <b>0.0500</b>	0.0055	0	0	-100	100	09/28/2023
Potassium		0.100		< <b>0.100</b>	0.0400	0	0	-100	100	09/28/2023
Silicon	*	0.0500		< <b>0.0500</b>	0.0122	0	0	-100	100	09/28/2023
Sodium		0.0500		< <b>0.0500</b>	0.0180	0	0	-100	100	09/28/2023

### Batch 212544 SampType: LCS Units mg/L

SampID: LCS-212544										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		<b>2.56</b>	2.500	0	102.5	85	115	09/28/2023
Magnesium		0.0500		<b>2.32</b>	2.500	0	92.9	85	115	09/28/2023
Potassium		0.100		<b>2.52</b>	2.500	0	100.8	85	115	09/28/2023
Silicon	*	0.0500		<b>0.455</b>	0.5000	0	91.0	85	115	09/28/2023
Sodium		0.0500		<b>2.46</b>	2.500	0	98.3	85	115	09/28/2023

### Batch 212544 SampType: MS Units mg/L

SampID: 23091473-035CMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		<b>31.4</b>	2.500	28.74	104.8	75	125	09/30/2023
Magnesium		0.0500		<b>14.6</b>	2.500	12.16	98.8	75	125	09/30/2023
Potassium		0.100		<b>2.93</b>	2.500	0.3187	104.5	75	125	09/30/2023
Silicon	*	0.0500		<b>23.8</b>	0.5000	23.25	117.4	75	125	09/30/2023
Sodium		0.0500		<b>34.9</b>	2.500	32.67	89.6	75	125	09/30/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212544		SampType: MSD		Units mg/L				RPD Limit: 20			
SampID: 23091473-035CMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100		<b>31.5</b>	2.500	28.74	110.0	31.36	0.41	09/30/2023	
Magnesium		0.0500		<b>14.7</b>	2.500	12.16	101.7	14.63	0.50	09/30/2023	
Potassium		0.100		<b>2.93</b>	2.500	0.3187	104.5	2.932	0.01	09/30/2023	
Silicon	*	0.0500	S	<b>24.0</b>	0.5000	23.25	160.3	23.83	0.90	09/30/2023	
Sodium		0.0500		<b>35.1</b>	2.500	32.67	96.0	34.91	0.46	09/30/2023	

Batch 212596		SampType: MBLK		Units mg/L							
SampID: MBLK-212596											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		< <b>0.100</b>	0.0350	0	0	-100	100	09/29/2023	
Magnesium		0.0500		< <b>0.0500</b>	0.0055	0	0	-100	100	09/29/2023	
Potassium		0.100		< <b>0.100</b>	0.0400	0	0	-100	100	09/29/2023	
Silicon	*	0.0500		< <b>0.0500</b>	0.0122	0	0	-100	100	09/29/2023	
Sodium		0.0500		< <b>0.0500</b>	0.0180	0	0	-100	100	09/29/2023	

Batch 212596		SampType: LCS		Units mg/L							
SampID: LCS-212596											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		<b>2.60</b>	2.500	0	104.0	85	115	09/29/2023	
Magnesium		0.0500		<b>2.52</b>	2.500	0	100.9	85	115	09/29/2023	
Potassium		0.100		<b>2.61</b>	2.500	0	104.2	85	115	09/29/2023	
Silicon	*	0.0500		<b>0.496</b>	0.5000	0	99.2	85	115	09/29/2023	
Sodium		0.0500		<b>2.49</b>	2.500	0	99.7	85	115	09/29/2023	

Batch 212596		SampType: MS		Units mg/L							
SampID: 23091473-017CMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100	S	<b>88.3</b>	2.500	84.83	140.0	75	125	09/29/2023	
Magnesium		0.0500		<b>27.9</b>	2.500	25.04	115.0	75	125	09/29/2023	
Potassium		0.100		<b>4.37</b>	2.500	1.685	107.3	75	125	09/29/2023	
Silicon	*	0.0500		<b>7.46</b>	0.5000	6.926	107.2	75	125	10/02/2023	
Sodium		0.0500		<b>31.5</b>	2.500	28.82	106.0	75	125	09/29/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212596		SampType: MSD		Units mg/L				RPD Limit: 20			
SampID: 23091473-017CMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100		<b>87.6</b>	2.500	84.83	112.0	88.33	0.80	09/29/2023	
Magnesium		0.0500		<b>27.7</b>	2.500	25.04	106.5	27.92	0.76	09/29/2023	
Potassium		0.100		<b>4.30</b>	2.500	1.685	104.6	4.366	1.50	09/29/2023	
Silicon	*	0.0500	S	<b>7.29</b>	0.5000	6.926	73.6	7.462	2.27	10/02/2023	
Sodium		0.0500		<b>31.1</b>	2.500	28.82	92.4	31.47	1.09	09/29/2023	

Batch 212657		SampType: MBLK		Units mg/L							
SampID: MBLK-212657											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		<b>&lt; 0.100</b>	0.0350	0	0	-100	100	10/02/2023	
Magnesium		0.0500		<b>&lt; 0.0500</b>	0.0055	0	0	-100	100	10/02/2023	
Potassium		0.100		<b>&lt; 0.100</b>	0.0400	0	0	-100	100	10/02/2023	
Silicon	*	0.0500		<b>&lt; 0.0500</b>	0.0122	0	0	-100	100	10/02/2023	
Sodium		0.0500		<b>&lt; 0.0500</b>	0.0180	0	0	-100	100	10/02/2023	

Batch 212657		SampType: LCS		Units mg/L							
SampID: LCS-212657											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		<b>2.65</b>	2.500	0	105.9	85	115	10/02/2023	
Magnesium		0.0500		<b>2.31</b>	2.500	0	92.2	85	115	10/02/2023	
Potassium		0.100		<b>2.73</b>	2.500	0	109.1	85	115	10/02/2023	
Silicon	*	0.0500		<b>0.474</b>	0.5000	0	94.7	85	115	10/02/2023	
Sodium		0.0500		<b>2.58</b>	2.500	0	103.1	85	115	10/02/2023	

Batch 212657		SampType: MS		Units mg/L							
SampID: 23091473-026CMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100	S	<b>66.7</b>	2.500	62.50	168.8	75	125	10/02/2023	
Magnesium		0.0500		<b>22.3</b>	2.500	19.33	117.2	75	125	10/02/2023	
Potassium		0.100		<b>3.81</b>	2.500	1.240	102.8	75	125	10/02/2023	
Silicon	*	0.0500		<b>7.22</b>	0.5000	6.601	124.7	75	125	10/02/2023	
Sodium		0.0500		<b>37.9</b>	2.500	35.70	86.8	75	125	10/02/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212657		SampType: MSD		Units mg/L				RPD Limit: 20			
SampID: 23091473-026CMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100	S	<b>67.5</b>	2.500	62.50	198.4	66.72	1.10	10/02/2023	
Magnesium		0.0500	S	<b>22.6</b>	2.500	19.33	132.4	22.26	1.69	10/02/2023	
Potassium		0.100		<b>3.91</b>	2.500	1.240	106.6	3.809	2.49	10/02/2023	
Silicon	*	0.0500	S	<b>7.40</b>	0.5000	6.601	159.7	7.224	2.40	10/02/2023	
Sodium		0.0500	S	<b>39.0</b>	2.500	35.70	130.0	37.87	2.81	10/02/2023	

Batch 212717		SampType: MBLK		Units mg/L							
SampID: MBLK-212717											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		<b>&lt; 0.100</b>	0.0350	0	0	-100	100	10/03/2023	
Magnesium		0.0500		<b>&lt; 0.0500</b>	0.0055	0	0	-100	100	10/03/2023	
Potassium		0.100		<b>&lt; 0.100</b>	0.0400	0	0	-100	100	10/03/2023	
Silicon	*	0.0500		<b>&lt; 0.0500</b>	0.0122	0	0	-100	100	10/03/2023	
Sodium		0.0500		<b>&lt; 0.0500</b>	0.0180	0	0	-100	100	10/03/2023	

Batch 212717		SampType: LCS		Units mg/L							
SampID: LCS-212717											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		<b>2.58</b>	2.500	0	103.0	85	115	10/03/2023	
Magnesium		0.0500		<b>2.45</b>	2.500	0	98.2	85	115	10/03/2023	
Potassium		0.100		<b>2.61</b>	2.500	0	104.2	85	115	10/03/2023	
Silicon	*	0.0500		<b>0.497</b>	0.5000	0	99.4	85	115	10/03/2023	
Sodium		0.0500		<b>2.49</b>	2.500	0	99.8	85	115	10/03/2023	

Batch 212717		SampType: MS		Units mg/L							
SampID: 23091473-031CMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100	S	<b>56.9</b>	2.500	55.14	71.6	75	125	10/03/2023	
Magnesium		0.0500		<b>18.1</b>	2.500	15.95	87.1	75	125	10/03/2023	
Potassium		0.100		<b>3.90</b>	2.500	1.345	102.1	75	125	10/03/2023	
Silicon	*	0.0500		<b>6.63</b>	0.5000	6.190	87.5	75	125	10/03/2023	
Sodium		0.0500		<b>21.1</b>	2.500	19.22	75.2	75	125	10/03/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212717		SampType: MSD		Units mg/L				RPD Limit: 20			
SampID: 23091473-031CMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100		<b>57.0</b>	2.500	55.14	76.0	56.93	0.19	10/03/2023	
Magnesium		0.0500		<b>18.1</b>	2.500	15.95	86.2	18.13	0.12	10/03/2023	
Potassium		0.100		<b>3.84</b>	2.500	1.345	99.7	3.897	1.55	10/03/2023	
Silicon	*	0.0500		<b>6.63</b>	0.5000	6.190	88.0	6.628	0.03	10/03/2023	
Sodium		0.0500	S	<b>20.8</b>	2.500	19.22	61.2	21.10	1.67	10/03/2023	

Batch 212717		SampType: MS		Units mg/L							
SampID: 23091473-047CMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100	S	<b>48.3</b>	2.500	44.82	139.2	75	125	10/03/2023	
Magnesium		0.0500		<b>17.2</b>	2.500	14.43	110.2	75	125	10/03/2023	
Potassium		0.100		<b>3.33</b>	2.500	0.7167	104.6	75	125	10/03/2023	
Silicon	*	0.0500	S	<b>22.2</b>	0.5000	21.38	161.2	75	125	10/03/2023	
Sodium		0.0500		<b>28.8</b>	2.500	26.52	90.0	75	125	10/03/2023	

Batch 212717		SampType: MSD		Units mg/L				RPD Limit: 20			
SampID: 23091473-047CMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100		<b>47.3</b>	2.500	44.82	100.8	48.30	2.01	10/03/2023	
Magnesium		0.0500		<b>16.8</b>	2.500	14.43	93.8	17.19	2.42	10/03/2023	
Potassium		0.100		<b>3.31</b>	2.500	0.7167	103.9	3.330	0.52	10/03/2023	
Silicon	*	0.0500		<b>21.9</b>	0.5000	21.38	104.9	22.19	1.28	10/03/2023	
Sodium		0.0500		<b>28.6</b>	2.500	26.52	81.2	28.77	0.77	10/03/2023	

Batch 212976		SampType: MBLK		Units mg/L							
SampID: MBLK-212976											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		<b>&lt; 0.100</b>	0.0350	0	0	-100	100	10/09/2023	
Magnesium		0.0500		<b>&lt; 0.0500</b>	0.0055	0	0	-100	100	10/09/2023	
Potassium		0.100		<b>&lt; 0.100</b>	0.0400	0	0	-100	100	10/09/2023	
Sodium		0.0500		<b>&lt; 0.0500</b>	0.0180	0	0	-100	100	10/09/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212976 SampType: LCS Units mg/L

SampID: LCS-212976

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		<b>2.50</b>	2.500	0	100.1	85	115	10/09/2023
Magnesium		0.0500		<b>2.37</b>	2.500	0	94.7	85	115	10/09/2023
Potassium		0.100		<b>2.54</b>	2.500	0	101.7	85	115	10/09/2023
Sodium		0.0500		<b>2.43</b>	2.500	0	97.1	85	115	10/09/2023

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

Batch 212672 SampType: MBLK Units mg/L

SampID: MBLK-212672

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		< <b>0.0250</b>	0.0125	0	0	-100	100	10/03/2023
Iron		0.0250		< <b>0.0250</b>	0.0115	0	0	-100	100	10/05/2023
Manganese		0.0020		< <b>0.0020</b>	0.0008	0	0	-100	100	10/03/2023

Batch 212672 SampType: LCS Units mg/L

SampID: LCS-212672

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		<b>1.69</b>	2.000	0	84.5	80	120	10/03/2023
Iron		0.0250		<b>1.74</b>	2.000	0	87.0	80	120	10/05/2023
Manganese		0.0020		<b>0.455</b>	0.5000	0	91.1	80	120	10/03/2023

Batch 212672 SampType: MS Units mg/L

SampID: 23091473-022DMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		<b>1.77</b>	2.000	0	88.5	75	125	10/03/2023
Iron		0.0250		<b>1.80</b>	2.000	0.1759	81.4	75	125	10/05/2023
Manganese		0.0020		<b>0.433</b>	0.5000	0	86.6	75	125	10/03/2023

Batch 212672 SampType: MSD Units mg/L

SampID: 23091473-022DMSD

RPD Limit: 20

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Aluminum		0.0250		<b>1.70</b>	2.000	0	85.0	1.769	3.98	10/03/2023
Iron		0.0250	R	<b>2.57</b>	2.000	0.1759	119.7	1.804	35.00	10/05/2023
Manganese		0.0020		<b>0.440</b>	0.5000	0	88.1	0.4328	1.72	10/03/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212672		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-023DMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Aluminum		0.0250		<b>1.66</b>	2.000	0	82.9	75	125	10/03/2023	
Iron		0.0250		<b>1.75</b>	2.000	0.08038	83.2	75	125	10/05/2023	
Manganese		0.0080		<b>9.21</b>	0.5000	8.755	91.5	75	125	10/04/2023	

Batch 212672		SampType: MSD		Units mg/L							RPD Limit: 20	Date Analyzed
SampID: 23091473-023DMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Aluminum		0.0250		<b>1.67</b>	2.000	0	83.4	1.657	0.72	10/03/2023		
Iron		0.0250	S	<b>1.56</b>	2.000	0.08038	74.2	1.745	10.99	10/05/2023		
Manganese		0.0080		<b>9.35</b>	0.5000	8.755	119.8	9.212	1.53	10/04/2023		

Batch 212674		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-212674											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Aluminum		0.0250		<b>&lt; 0.0250</b>	0.0125	0	0	-100	100	10/03/2023	
Iron		0.0250		<b>&lt; 0.0250</b>	0.0115	0	0	-100	100	10/04/2023	
Manganese		0.0020		<b>&lt; 0.0020</b>	0.0008	0	0	-100	100	10/03/2023	

Batch 212674		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-212674											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Aluminum		0.0250		<b>1.89</b>	2.000	0	94.4	80	120	10/03/2023	
Iron		0.0250		<b>1.92</b>	2.000	0	96.1	80	120	10/04/2023	
Manganese		0.0020		<b>0.484</b>	0.5000	0	96.8	80	120	10/03/2023	

Batch 212674		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-029DMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Aluminum		0.0250		<b>1.84</b>	2.000	0	91.8	75	125	10/03/2023	
Iron		0.0250		<b>2.81</b>	2.000	0.9849	91.1	75	125	10/04/2023	
Manganese		0.0020		<b>0.621</b>	0.5000	0.1397	96.3	75	125	10/03/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212674		SampType: MSD		Units mg/L				RPD Limit: 20			Date Analyzed
SampID: 23091473-029DMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Aluminum		0.0250		<b>1.88</b>	2.000	0	94.2	1.837	2.53	10/03/2023	
Iron		0.0250		<b>2.86</b>	2.000	0.9849	93.5	2.807	1.74	10/04/2023	
Manganese		0.0020		<b>0.634</b>	0.5000	0.1397	98.8	0.6213	2.00	10/03/2023	

Batch 212674		SampType: MS		Units mg/L				RPD Limit: 20			Date Analyzed
SampID: 23091473-037DMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Aluminum		0.0250		<b>1.74</b>	2.000	0	86.9	75	125	10/04/2023	
Iron		0.0250		<b>1.77</b>	2.000	0.1009	83.4	75	125	10/05/2023	
Manganese		0.0020		<b>0.551</b>	0.5000	0.1718	75.9	75	125	10/04/2023	

Batch 212674		SampType: MSD		Units mg/L				RPD Limit: 20			Date Analyzed
SampID: 23091473-037DMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Aluminum		0.0250		<b>1.87</b>	2.000	0	93.3	1.739	7.07	10/04/2023	
Iron		0.0250		<b>1.63</b>	2.000	0.1009	76.6	1.769	8.03	10/05/2023	
Manganese		0.0020		<b>0.602</b>	0.5000	0.1718	86.0	0.5513	8.76	10/04/2023	

Batch 212689		SampType: MBLK		Units mg/L				RPD Limit: 20			Date Analyzed
SampID: MBLK-212689											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Aluminum		0.0250		<b>&lt; 0.0250</b>	0.0125	0	0	-100	100	10/04/2023	
Iron		0.0250		<b>&lt; 0.0250</b>	0.0115	0	0	-100	100	10/04/2023	
Manganese		0.0020		<b>&lt; 0.0020</b>	0.0008	0	0	-100	100	10/04/2023	

Batch 212689		SampType: LCS		Units mg/L				RPD Limit: 20			Date Analyzed
SampID: LCS-212689											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Aluminum		0.0250		<b>1.91</b>	2.000	0	95.6	80	120	10/04/2023	
Iron		0.0250	S	<b>3.36</b>	2.000	0	168.2	80	120	10/04/2023	
Iron		0.0250		<b>1.76</b>	2.000	0	88.1	80	120	10/05/2023	
Manganese		0.0020		<b>0.503</b>	0.5000	0	100.6	80	120	10/04/2023	





## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212689		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-044DMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Aluminum		0.0250		<b>8.99</b>	2.000	7.136	92.5	75	125	10/04/2023	
Iron		0.0250		<b>1.80</b>	2.000	0	89.8	75	125	10/04/2023	
Manganese		0.0020		<b>0.477</b>	0.5000	0	95.3	75	125	10/04/2023	

Batch 212689		SampType: MSD		Units mg/L							RPD Limit: 20	Date Analyzed
SampID: 23091473-044DMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Aluminum		0.0250		<b>9.07</b>	2.000	7.136	96.7	8.985	0.94	10/04/2023		
Iron		0.0250		<b>1.82</b>	2.000	0	91.0	1.795	1.39	10/04/2023		
Manganese		0.0020		<b>0.472</b>	0.5000	0	94.4	0.4765	0.94	10/04/2023		

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

Batch 212544		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-212544											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Aluminum		0.0250		< <b>0.0250</b>	0.0125	0	0	-100	100	10/02/2023	
Antimony		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	09/29/2023	
Arsenic		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	09/29/2023	
Barium		0.0010		< <b>0.0010</b>	0.0007	0	0	-100	100	09/29/2023	
Beryllium		0.0010		< <b>0.0010</b>	0.0002	0	0	-100	100	09/29/2023	
Boron		0.0250		< <b>0.0250</b>	0.0093	0	0	-100	100	09/29/2023	
Cadmium		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	09/29/2023	
Chromium		0.0015		< <b>0.0015</b>	0.0007	0	0	-100	100	10/02/2023	
Cobalt		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	09/29/2023	
Iron		0.0250		< <b>0.0250</b>	0.0115	0	0	-100	100	09/29/2023	
Lead		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	09/29/2023	
Lithium	*	0.0030		< <b>0.0030</b>	0.0015	0	0	-100	100	09/29/2023	
Manganese		0.0020		< <b>0.0020</b>	0.0008	0	0	-100	100	09/29/2023	
Molybdenum	*	0.0015		< <b>0.0015</b>	0.0006	0	0	-100	100	09/29/2023	
Selenium		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	09/29/2023	
Thallium		0.0020		< <b>0.0020</b>	0.0010	0	0	-100	100	09/29/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212544 SampType: LCS Units mg/L  
SampID: LCS-212544

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		<b>2.03</b>	2.000	0	101.7	80	120	10/02/2023
Antimony		0.0010		<b>0.533</b>	0.5000	0	106.6	80	120	10/02/2023
Arsenic		0.0010		<b>0.523</b>	0.5000	0	104.5	80	120	10/02/2023
Barium		0.0010		<b>2.17</b>	2.000	0	108.4	80	120	09/29/2023
Beryllium		0.0010		<b>0.0528</b>	0.0500	0	105.6	80	120	09/29/2023
Boron		0.0250		<b>0.491</b>	0.5000	0	98.1	80	120	09/29/2023
Cadmium		0.0010		<b>0.0523</b>	0.0500	0	104.7	80	120	09/29/2023
Chromium		0.0015		<b>0.205</b>	0.2000	0	102.5	80	120	10/02/2023
Cobalt		0.0010		<b>0.500</b>	0.5000	0	100.0	80	120	09/29/2023
Iron		0.0250		<b>2.10</b>	2.000	0	104.8	80	120	09/29/2023
Lead		0.0010		<b>0.543</b>	0.5000	0	108.5	80	120	09/29/2023
Lithium	*	0.0030		<b>0.568</b>	0.5000	0	113.5	80	120	09/29/2023
Manganese		0.0020		<b>0.515</b>	0.5000	0	103.0	80	120	10/02/2023
Molybdenum	*	0.0015		<b>0.495</b>	0.5000	0	99.0	80	120	09/29/2023
Selenium		0.0010		<b>0.495</b>	0.5000	0	99.1	80	120	10/02/2023
Thallium		0.0020		<b>0.259</b>	0.2500	0	103.8	80	120	09/29/2023

Batch 212544 SampType: MS Units mg/L  
SampID: 23091473-035CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		<b>2.20</b>	2.000	0.3315	93.4	75	125	10/02/2023
Antimony		0.0010		<b>0.493</b>	0.5000	0	98.6	75	125	10/02/2023
Arsenic		0.0010		<b>0.454</b>	0.5000	0	90.7	75	125	10/02/2023
Barium		0.0010		<b>1.96</b>	2.000	0.03486	96.1	75	125	10/02/2023
Beryllium		0.0010	S	<b>0.0710</b>	0.0500	0	141.9	75	125	09/29/2023
Cadmium		0.0010	S	<b>0.0708</b>	0.0500	0	141.5	75	125	09/29/2023
Chromium		0.0015		<b>0.179</b>	0.2000	0.001690	88.7	75	125	10/02/2023
Cobalt		0.0010		<b>0.444</b>	0.5000	0.0007748	88.7	75	125	10/02/2023
Iron		0.0250	S	<b>1.94</b>	2.000	0.5421	70.1	75	125	10/05/2023
Lead		0.0010	S	<b>0.718</b>	0.5000	0	143.6	75	125	09/29/2023
Lithium	*	0.0030		<b>0.476</b>	0.5000	0.005808	94.0	75	125	10/02/2023
Manganese		0.0020		<b>0.456</b>	0.5000	0.02214	86.8	75	125	10/02/2023
Molybdenum	*	0.0015	S	<b>0.671</b>	0.5000	0	134.3	75	125	09/29/2023
Selenium		0.0010		<b>0.433</b>	0.5000	0.005102	85.5	75	125	10/02/2023
Thallium		0.0020	S	<b>0.340</b>	0.2500	0	135.9	75	125	09/29/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212544		SampType: MSD		Units mg/L				RPD Limit: 20			Date
SampID: 23091473-035CMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Aluminum		0.0250		<b>2.29</b>	2.000	0.3315	98.1	2.199	4.22	10/02/2023	
Antimony		0.0010		<b>0.497</b>	0.5000	0	99.4	0.4929	0.82	10/02/2023	
Arsenic		0.0010		<b>0.480</b>	0.5000	0	96.0	0.4536	5.62	10/02/2023	
Barium		0.0010		<b>2.00</b>	2.000	0.03486	98.4	1.956	2.31	10/02/2023	
Beryllium		0.0010	S	<b>0.0702</b>	0.0500	0	140.3	0.07097	1.13	09/29/2023	
Cadmium		0.0010	S	<b>0.0691</b>	0.0500	0	138.2	0.07076	2.38	09/29/2023	
Chromium		0.0015		<b>0.187</b>	0.2000	0.001690	92.9	0.1791	4.56	10/02/2023	
Cobalt		0.0010		<b>0.472</b>	0.5000	0.0007748	94.3	0.4441	6.12	10/02/2023	
Iron		0.0250		<b>2.17</b>	2.000	0.5421	81.4	1.945	10.91	10/05/2023	
Lead		0.0010	S	<b>0.693</b>	0.5000	0	138.6	0.7179	3.52	09/29/2023	
Lithium	*	0.0030		<b>0.490</b>	0.5000	0.005808	96.8	0.4760	2.90	10/02/2023	
Manganese		0.0020		<b>0.487</b>	0.5000	0.02214	93.0	0.4562	6.58	10/02/2023	
Molybdenum	*	0.0015	S	<b>0.655</b>	0.5000	0	131.1	0.6713	2.38	09/29/2023	
Selenium		0.0010		<b>0.462</b>	0.5000	0.005102	91.4	0.4326	6.63	10/02/2023	
Thallium		0.0020	S	<b>0.323</b>	0.2500	0	129.3	0.3396	4.97	09/29/2023	

### Batch 212596 SampType: MBLK Units mg/L

SampID: MBLK-212596										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		< <b>0.0250</b>	0.0125	0	0	-100	100	10/02/2023
Antimony		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	10/02/2023
Arsenic		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	10/02/2023
Barium		0.0010		< <b>0.0010</b>	0.0007	0	0	-100	100	10/03/2023
Beryllium		0.0010		< <b>0.0010</b>	0.0002	0	0	-100	100	10/02/2023
Boron		0.0250		< <b>0.0250</b>	0.0093	0	0	-100	100	10/02/2023
Cadmium		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	10/02/2023
Chromium		0.0015		< <b>0.0015</b>	0.0007	0	0	-100	100	10/02/2023
Cobalt		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	10/02/2023
Iron		0.0250		< <b>0.0250</b>	0.0115	0	0	-100	100	10/02/2023
Lead		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	10/02/2023
Lithium	*	0.0030		< <b>0.0030</b>	0.0015	0	0	-100	100	10/02/2023
Manganese		0.0020		< <b>0.0020</b>	0.0008	0	0	-100	100	10/02/2023
Molybdenum	*	0.0015		< <b>0.0015</b>	0.0006	0	0	-100	100	10/02/2023
Selenium		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	10/02/2023
Thallium		0.0020		< <b>0.0020</b>	0.0010	0	0	-100	100	10/02/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212596		SampType: LCS		Units mg/L							Date
SampID: LCS-212596											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
Aluminum		0.0250		1.83	2.000	0	91.6	80	120	10/02/2023	
Antimony		0.0010		0.559	0.5000	0	111.9	80	120	10/02/2023	
Arsenic		0.0010		0.560	0.5000	0	112.0	80	120	10/02/2023	
Barium		0.0010		1.92	2.000	0	96.1	80	120	10/03/2023	
Beryllium		0.0010		0.0536	0.0500	0	107.2	80	120	10/02/2023	
Boron		0.0250		0.466	0.5000	0	93.3	80	120	10/02/2023	
Cadmium		0.0010		0.0515	0.0500	0	103.0	80	120	10/02/2023	
Chromium		0.0015		0.203	0.2000	0	101.7	80	120	10/02/2023	
Cobalt		0.0010		0.521	0.5000	0	104.2	80	120	10/02/2023	
Iron		0.0250		2.17	2.000	0	108.6	80	120	10/02/2023	
Lead		0.0010		0.492	0.5000	0	98.3	80	120	10/02/2023	
Lithium	*	0.0030		0.534	0.5000	0	106.7	80	120	10/02/2023	
Manganese		0.0020		0.496	0.5000	0	99.2	80	120	10/02/2023	
Molybdenum	*	0.0015		0.500	0.5000	0	100.0	80	120	10/02/2023	
Selenium		0.0010		0.468	0.5000	0	93.6	80	120	10/02/2023	
Thallium		0.0020		0.246	0.2500	0	98.5	80	120	10/02/2023	

Batch 212596		SampType: MS		Units mg/L							Date
SampID: 23091473-017CMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
Aluminum		0.0250		1.97	2.000	0	98.7	75	125	10/02/2023	
Antimony		0.0010		0.575	0.5000	0	115.1	75	125	10/02/2023	
Arsenic		0.0010		0.558	0.5000	0	111.6	75	125	10/02/2023	
Barium		0.0010		1.99	2.000	0.02822	98.2	75	125	10/03/2023	
Beryllium		0.0010		0.0618	0.0500	0	123.7	75	125	10/02/2023	
Boron		0.0250		7.07	0.5000	6.576	99.7	75	125	10/02/2023	
Cadmium		0.0010		0.0540	0.0500	0	108.0	75	125	10/02/2023	
Chromium		0.0015		0.210	0.2000	0.0007244	104.8	75	125	10/02/2023	
Cobalt		0.0010		0.517	0.5000	0	103.3	75	125	10/02/2023	
Iron		0.0250		2.09	2.000	0.06497	101.3	75	125	10/02/2023	
Lead		0.0010		0.520	0.5000	0	103.9	75	125	10/02/2023	
Lithium	*	0.0030		0.598	0.5000	0	119.6	75	125	10/02/2023	
Manganese		0.0020		0.508	0.5000	0.004257	100.7	75	125	10/02/2023	
Molybdenum	*	0.0015		0.504	0.5000	0	100.8	75	125	10/02/2023	
Selenium		0.0010		0.459	0.5000	0	91.9	75	125	10/02/2023	
Thallium		0.0020		0.265	0.2500	0	106.0	75	125	10/02/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212596		SampType: MSD		Units mg/L				RPD Limit: 20			Date
SampID: 23091473-017CMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Aluminum		0.0250		<b>1.88</b>	2.000	0	94.1	1.974	4.73	10/02/2023	
Antimony		0.0010		<b>0.537</b>	0.5000	0	107.4	0.5755	6.90	10/02/2023	
Arsenic		0.0010		<b>0.575</b>	0.5000	0	115.0	0.5578	3.00	10/02/2023	
Barium		0.0010		<b>1.96</b>	2.000	0.02822	96.7	1.992	1.47	10/03/2023	
Beryllium		0.0010		<b>0.0618</b>	0.0500	0	123.5	0.06185	0.15	10/02/2023	
Boron		0.0250		<b>7.05</b>	0.5000	6.576	95.6	7.075	0.29	10/02/2023	
Cadmium		0.0010		<b>0.0505</b>	0.0500	0	101.0	0.05398	6.66	10/02/2023	
Chromium		0.0015		<b>0.204</b>	0.2000	0.0007244	101.7	0.2103	2.95	10/02/2023	
Cobalt		0.0010		<b>0.515</b>	0.5000	0	102.9	0.5166	0.36	10/02/2023	
Iron		0.0250		<b>2.13</b>	2.000	0.06497	103.4	2.090	1.99	10/02/2023	
Lead		0.0010		<b>0.493</b>	0.5000	0	98.5	0.5195	5.34	10/02/2023	
Lithium	*	0.0030		<b>0.588</b>	0.5000	0	117.5	0.5982	1.80	10/02/2023	
Manganese		0.0020		<b>0.511</b>	0.5000	0.004257	101.3	0.5078	0.60	10/02/2023	
Molybdenum	*	0.0015		<b>0.500</b>	0.5000	0	100.0	0.5042	0.88	10/02/2023	
Selenium		0.0010		<b>0.479</b>	0.5000	0	95.7	0.4593	4.11	10/02/2023	
Thallium		0.0020		<b>0.238</b>	0.2500	0	95.1	0.2650	10.89	10/02/2023	

### Batch 212657 SampType: MBLK Units mg/L

SampID: MBLK-212657										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		< <b>0.0250</b>	0.0125	0	0	-100	100	10/06/2023
Antimony		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	10/03/2023
Arsenic		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	10/03/2023
Barium		0.0010		< <b>0.0010</b>	0.0007	0	0	-100	100	10/03/2023
Beryllium		0.0010		< <b>0.0010</b>	0.0002	0	0	-100	100	10/03/2023
Boron		0.0250		< <b>0.0250</b>	0.0093	0	0	-100	100	10/03/2023
Cadmium		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	10/03/2023
Chromium		0.0015		< <b>0.0015</b>	0.0007	0	0	-100	100	10/03/2023
Cobalt		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	10/03/2023
Iron		0.0250		< <b>0.0250</b>	0.0115	0	0	-100	100	10/05/2023
Lead		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	10/03/2023
Lithium	*	0.0030		< <b>0.0030</b>	0.0015	0	0	-100	100	10/03/2023
Manganese		0.0020		< <b>0.0020</b>	0.0008	0	0	-100	100	10/03/2023
Molybdenum	*	0.0015		< <b>0.0015</b>	0.0006	0	0	-100	100	10/03/2023
Selenium		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	10/03/2023
Thallium		0.0020		< <b>0.0020</b>	0.0010	0	0	-100	100	10/03/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212657 SampType: LCS Units mg/L  
SampID: LCS-212657

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		2.20	2.000	0	110.2	80	120	10/06/2023
Antimony		0.0010		0.494	0.5000	0	98.8	80	120	10/03/2023
Arsenic		0.0010		0.511	0.5000	0	102.3	80	120	10/03/2023
Barium		0.0010		2.01	2.000	0	100.5	80	120	10/03/2023
Beryllium		0.0010		0.0490	0.0500	0	98.0	80	120	10/03/2023
Boron		0.0250		0.518	0.5000	0	103.6	80	120	10/03/2023
Cadmium		0.0010		0.0490	0.0500	0	97.9	80	120	10/03/2023
Chromium		0.0015		0.191	0.2000	0	95.3	80	120	10/03/2023
Cobalt		0.0010		0.493	0.5000	0	98.7	80	120	10/03/2023
Iron		0.0250		1.95	2.000	0	97.4	80	120	10/05/2023
Lead		0.0010		0.502	0.5000	0	100.5	80	120	10/03/2023
Lithium	*	0.0030		0.504	0.5000	0	100.9	80	120	10/03/2023
Manganese		0.0020		0.495	0.5000	0	99.0	80	120	10/03/2023
Molybdenum	*	0.0015		0.489	0.5000	0	97.8	80	120	10/03/2023
Selenium		0.0010		0.478	0.5000	0	95.6	80	120	10/03/2023
Thallium		0.0020		0.265	0.2500	0	106.1	80	120	10/03/2023

Batch 212657 SampType: MS Units mg/L  
SampID: 23091473-026CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		2.06	2.000	0.02151	101.8	75	125	10/06/2023
Antimony		0.0010		0.472	0.5000	0	94.3	75	125	10/03/2023
Arsenic		0.0010		0.495	0.5000	0	99.0	75	125	10/03/2023
Barium		0.0010		1.99	2.000	0.07412	95.9	75	125	10/03/2023
Beryllium		0.0010		0.0489	0.0500	0	97.7	75	125	10/03/2023
Boron		0.0250		1.13	0.5000	0.6680	91.8	75	125	10/03/2023
Cadmium		0.0010		0.0471	0.0500	0	94.2	75	125	10/03/2023
Chromium		0.0015		0.187	0.2000	0.001241	92.6	75	125	10/03/2023
Cobalt		0.0010		0.471	0.5000	0.0001511	94.1	75	125	10/03/2023
Iron		0.0250		2.01	2.000	0.2050	90.0	75	125	10/05/2023
Lead		0.0010		0.511	0.5000	0	102.3	75	125	10/03/2023
Lithium	*	0.0030		0.495	0.5000	0.001896	98.6	75	125	10/03/2023
Manganese		0.0020		0.485	0.5000	0.01078	94.8	75	125	10/03/2023
Molybdenum	*	0.0015		0.485	0.5000	0	97.0	75	125	10/04/2023
Selenium		0.0010		0.457	0.5000	0.001224	91.1	75	125	10/03/2023
Thallium		0.0020		0.245	0.2500	0	98.1	75	125	10/03/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212657		SampType: MSD		Units mg/L				RPD Limit: 20			Date
SampID: 23091473-026CMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Aluminum		0.0250		<b>2.08</b>	2.000	0.02151	103.0	2.058	1.11	10/06/2023	
Antimony		0.0010		<b>0.484</b>	0.5000	0	96.7	0.4717	2.46	10/03/2023	
Arsenic		0.0010		<b>0.516</b>	0.5000	0	103.3	0.4950	4.26	10/03/2023	
Barium		0.0010		<b>2.06</b>	2.000	0.07412	99.1	1.992	3.14	10/03/2023	
Beryllium		0.0010		<b>0.0502</b>	0.0500	0	100.5	0.04887	2.74	10/03/2023	
Boron		0.0250		<b>1.23</b>	0.5000	0.6680	112.1	1.127	8.62	10/03/2023	
Cadmium		0.0010		<b>0.0475</b>	0.0500	0	95.0	0.04712	0.78	10/03/2023	
Chromium		0.0015		<b>0.192</b>	0.2000	0.001241	95.2	0.1865	2.71	10/03/2023	
Cobalt		0.0010		<b>0.485</b>	0.5000	0.0001511	97.0	0.4707	3.03	10/03/2023	
Iron		0.0250		<b>1.93</b>	2.000	0.2050	86.2	2.005	3.91	10/05/2023	
Lead		0.0010		<b>0.514</b>	0.5000	0	102.8	0.5115	0.45	10/03/2023	
Lithium	*	0.0030		<b>0.509</b>	0.5000	0.001896	101.5	0.4951	2.81	10/03/2023	
Manganese		0.0020		<b>0.495</b>	0.5000	0.01078	96.9	0.4848	2.19	10/03/2023	
Molybdenum	*	0.0015		<b>0.499</b>	0.5000	0	99.8	0.4851	2.80	10/04/2023	
Selenium		0.0010		<b>0.481</b>	0.5000	0.001224	96.0	0.4568	5.21	10/03/2023	
Thallium		0.0020		<b>0.250</b>	0.2500	0	100.2	0.2452	2.12	10/03/2023	

Batch 212717		SampType: MBLK		Units mg/L						Date
SampID: MBLK-212717										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		< <b>0.0250</b>	0.0125	0	0	-100	100	10/04/2023
Antimony		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	10/04/2023
Arsenic		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	10/04/2023
Barium		0.0010		< <b>0.0010</b>	0.0007	0	0	-100	100	10/04/2023
Beryllium		0.0010		< <b>0.0010</b>	0.0002	0	0	-100	100	10/04/2023
Boron		0.0250		< <b>0.0250</b>	0.0093	0	0	-100	100	10/04/2023
Cadmium		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	10/04/2023
Chromium		0.0015		< <b>0.0015</b>	0.0007	0	0	-100	100	10/04/2023
Cobalt		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	10/04/2023
Iron		0.0250		< <b>0.0250</b>	0.0115	0	0	-100	100	10/09/2023
Lead		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	10/04/2023
Lithium	*	0.0030		< <b>0.0030</b>	0.0015	0	0	-100	100	10/04/2023
Manganese		0.0020		< <b>0.0020</b>	0.0008	0	0	-100	100	10/04/2023
Molybdenum	*	0.0015		< <b>0.0015</b>	0.0006	0	0	-100	100	10/04/2023
Selenium		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	10/04/2023
Thallium		0.0020		< <b>0.0020</b>	0.0010	0	0	-100	100	10/04/2023





## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212717 SampType: LCS Units mg/L  
SampID: LCS-212717

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		<b>2.07</b>	2.000	0	103.5	80	120	10/04/2023
Antimony		0.0010		<b>0.547</b>	0.5000	0	109.4	80	120	10/04/2023
Arsenic		0.0010		<b>0.512</b>	0.5000	0	102.5	80	120	10/04/2023
Barium		0.0010		<b>2.16</b>	2.000	0	107.9	80	120	10/04/2023
Beryllium		0.0010		<b>0.0506</b>	0.0500	0	101.2	80	120	10/04/2023
Boron		0.0250		<b>0.521</b>	0.5000	0	104.2	80	120	10/04/2023
Cadmium		0.0010		<b>0.0517</b>	0.0500	0	103.4	80	120	10/04/2023
Chromium		0.0015		<b>0.201</b>	0.2000	0	100.6	80	120	10/04/2023
Cobalt		0.0010		<b>0.495</b>	0.5000	0	99.1	80	120	10/04/2023
Iron		0.0250		<b>1.71</b>	2.000	0	85.4	80	120	10/09/2023
Lead		0.0010		<b>0.542</b>	0.5000	0	108.4	80	120	10/04/2023
Lithium	*	0.0030		<b>0.531</b>	0.5000	0	106.2	80	120	10/04/2023
Manganese		0.0020		<b>0.521</b>	0.5000	0	104.2	80	120	10/04/2023
Molybdenum	*	0.0015		<b>0.495</b>	0.5000	0	99.1	80	120	10/04/2023
Selenium		0.0010		<b>0.497</b>	0.5000	0	99.3	80	120	10/04/2023
Thallium		0.0020		<b>0.254</b>	0.2500	0	101.5	80	120	10/04/2023

Batch 212717 SampType: MS Units mg/L  
SampID: 23091473-031CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		<b>2.09</b>	2.000	0.1052	99.4	75	125	10/04/2023
Antimony		0.0010		<b>0.529</b>	0.5000	0	105.9	75	125	10/04/2023
Arsenic		0.0010		<b>0.496</b>	0.5000	0.0005566	99.0	75	125	10/04/2023
Barium		0.0010		<b>2.17</b>	2.000	0.1183	102.4	75	125	10/04/2023
Beryllium		0.0010		<b>0.0507</b>	0.0500	0	101.5	75	125	10/04/2023
Boron		0.0250	S	<b>1.19</b>	0.5000	0.8962	58.8	75	125	10/04/2023
Cadmium		0.0010		<b>0.0507</b>	0.0500	0	101.3	75	125	10/04/2023
Chromium		0.0015		<b>0.196</b>	0.2000	0.001699	97.0	75	125	10/04/2023
Cobalt		0.0010		<b>0.476</b>	0.5000	0.0005268	95.1	75	125	10/04/2023
Iron		0.0250		<b>3.25</b>	2.000	0.9571	114.7	75	125	10/09/2023
Lead		0.0010		<b>0.531</b>	0.5000	0	106.2	75	125	10/04/2023
Lithium	*	0.0030		<b>0.515</b>	0.5000	0	103.0	75	125	10/04/2023
Manganese		0.0020		<b>0.558</b>	0.5000	0.05514	100.7	75	125	10/09/2023
Molybdenum	*	0.0015		<b>0.480</b>	0.5000	0.004482	95.0	75	125	10/04/2023
Selenium		0.0010		<b>0.476</b>	0.5000	0	95.1	75	125	10/04/2023
Thallium		0.0020		<b>0.248</b>	0.2500	0	99.1	75	125	10/04/2023





## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212717		SampType: MSD		Units mg/L				RPD Limit: 20			Date
SampID: 23091473-031CMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Aluminum		0.0250		2.11	2.000	0.1052	100.5	2.093	1.02	10/04/2023	
Antimony		0.0010		0.527	0.5000	0	105.5	0.5293	0.36	10/04/2023	
Arsenic		0.0010		0.484	0.5000	0.0005566	96.7	0.4955	2.30	10/04/2023	
Barium		0.0010		2.19	2.000	0.1183	103.5	2.167	0.94	10/04/2023	
Beryllium		0.0010		0.0502	0.0500	0	100.4	0.05074	1.09	10/04/2023	
Boron		0.0250	S	1.19	0.5000	0.8962	57.8	1.190	0.42	10/04/2023	
Cadmium		0.0010		0.0491	0.0500	0	98.2	0.05067	3.13	10/04/2023	
Chromium		0.0015		0.196	0.2000	0.001699	97.1	0.1957	0.12	10/04/2023	
Cobalt		0.0010		0.477	0.5000	0.0005268	95.2	0.4761	0.13	10/04/2023	
Iron		0.0250	R	2.49	2.000	0.9571	76.9	3.252	26.34	10/09/2023	
Lead		0.0010		0.527	0.5000	0	105.5	0.5308	0.64	10/04/2023	
Lithium	*	0.0030		0.519	0.5000	0	103.8	0.5151	0.71	10/04/2023	
Manganese		0.0020		0.556	0.5000	0.05514	100.1	0.5585	0.53	10/09/2023	
Molybdenum	*	0.0015		0.478	0.5000	0.004482	94.7	0.4796	0.29	10/04/2023	
Selenium		0.0010		0.471	0.5000	0	94.2	0.4756	0.96	10/04/2023	
Thallium		0.0020		0.244	0.2500	0	97.5	0.2478	1.63	10/04/2023	

Batch 212717		SampType: MS		Units mg/L						Date
SampID: 23091473-047CMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aluminum		0.0250		1.97	2.000	0.03177	97.0	75	125	10/04/2023
Antimony		0.0010		0.524	0.5000	0	104.9	75	125	10/04/2023
Arsenic		0.0010		0.550	0.5000	0.001276	109.7	75	125	10/09/2023
Barium		0.0010		2.32	2.000	0.2419	103.7	75	125	10/04/2023
Beryllium		0.0010		0.0495	0.0500	0	99.0	75	125	10/04/2023
Boron		0.0250		0.522	0.5000	0.03137	98.1	75	125	10/04/2023
Cadmium		0.0010		0.0495	0.0500	0	99.0	75	125	10/04/2023
Chromium		0.0015		0.194	0.2000	0	96.8	75	125	10/04/2023
Cobalt		0.0010		0.505	0.5000	0.003189	100.4	75	125	10/09/2023
Iron		0.0250		2.87	2.000	0.6584	110.8	75	125	10/09/2023
Lead		0.0010		0.526	0.5000	0	105.2	75	125	10/04/2023
Lithium	*	0.0030		0.515	0.5000	0.002571	102.4	75	125	10/04/2023
Manganese		0.0020		0.690	0.5000	0.1897	100.0	75	125	10/09/2023
Molybdenum	*	0.0015		0.511	0.5000	0.001260	101.9	75	125	10/10/2023
Selenium		0.0010		0.477	0.5000	0	95.3	75	125	10/04/2023
Thallium		0.0020		0.245	0.2500	0	98.1	75	125	10/04/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212717		SampType: MSD		Units mg/L				RPD Limit: 20			Date Analyzed
SampID: 23091473-047CMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Aluminum		0.0250		<b>2.03</b>	2.000	0.03177	100.1	1.971	3.10	10/04/2023	
Antimony		0.0010		<b>0.542</b>	0.5000	0	108.4	0.5244	3.26	10/04/2023	
Arsenic		0.0010		<b>0.543</b>	0.5000	0.001276	108.3	0.5498	1.33	10/09/2023	
Barium		0.0010		<b>2.48</b>	2.000	0.2419	111.9	2.316	6.84	10/04/2023	
Beryllium		0.0010		<b>0.0502</b>	0.0500	0	100.5	0.04949	1.48	10/04/2023	
Boron		0.0250		<b>0.521</b>	0.5000	0.03137	97.9	0.5218	0.20	10/04/2023	
Cadmium		0.0010		<b>0.0506</b>	0.0500	0	101.2	0.04950	2.21	10/04/2023	
Chromium		0.0015		<b>0.198</b>	0.2000	0	99.1	0.1935	2.43	10/04/2023	
Cobalt		0.0010		<b>0.505</b>	0.5000	0.003189	100.4	0.5053	0.00	10/09/2023	
Iron		0.0250	SR	<b>3.71</b>	2.000	0.6584	152.8	2.874	25.50	10/09/2023	
Lead		0.0010		<b>0.519</b>	0.5000	0	103.8	0.5258	1.30	10/04/2023	
Lithium	*	0.0030		<b>0.517</b>	0.5000	0.002571	102.9	0.5146	0.53	10/04/2023	
Manganese		0.0020		<b>0.695</b>	0.5000	0.1897	101.0	0.6898	0.70	10/09/2023	
Molybdenum	*	0.0015		<b>0.507</b>	0.5000	0.001260	101.2	0.5105	0.69	10/10/2023	
Selenium		0.0010		<b>0.489</b>	0.5000	0	97.8	0.4765	2.55	10/04/2023	
Thallium		0.0020		<b>0.247</b>	0.2500	0	98.8	0.2452	0.77	10/04/2023	

Batch 212976		SampType: MBLK		Units mg/L						Date Analyzed
SampID: MBLK-212976										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	10/10/2023
Boron		0.0250		< <b>0.0250</b>	0.0093	0	0	-100	100	10/10/2023
Selenium		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	10/10/2023

Batch 212976		SampType: LCS		Units mg/L						Date Analyzed
SampID: LCS-212976										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic		0.0010		<b>0.518</b>	0.5000	0	103.6	85	115	10/10/2023
Boron		0.0250		<b>0.499</b>	0.5000	0	99.9	80	120	10/10/2023
Selenium		0.0010		<b>0.471</b>	0.5000	0	94.3	80	120	10/10/2023

Batch 212976		SampType: MS		Units mg/L						Date Analyzed
SampID: 23091473-035CMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Boron		0.0250	S	<b>1.15</b>	0.5000	0.8993	50.7	75	125	10/10/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

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

Batch 212976		SampType: MSD		Units mg/L		RPD Limit: 20				
SampID: 23091473-035CMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Boron		0.0250	S	1.12	0.5000	0.8993	43.4	1.153	3.24	10/10/2023

### SW-846 7470A (TOTAL)

Batch 212516		SampType: MBLK		Units mg/L						
SampID: MBLK-212516										
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	09/29/2023

Batch 212516		SampType: LCS		Units mg/L						
SampID: LCS-212516										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00522	0.0050	0	104.3	85	115	09/29/2023

Batch 212516		SampType: MS		Units mg/L						
SampID: 23091473-041CMS										
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	75	125	09/29/2023

Batch 212516		SampType: MSD		Units mg/L		RPD Limit: 15				
SampID: 23091473-041CMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		0.00498	0.0050	0	99.6	0.005119	2.74	09/29/2023

Batch 212711		SampType: MBLK		Units mg/L						
SampID: MBLK-212711										
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	10/03/2023

Batch 212711		SampType: LCS		Units mg/L						
SampID: LCS-212711										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00425	0.0050	0	85.1	85	115	10/03/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

### SW-846 7470A (TOTAL)

Batch 212711		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-006CMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00520</b>	0.0050	0.00006420	102.7	75	125	10/03/2023	

Batch 212711		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23091473-006CMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Mercury		0.00020		<b>0.00518</b>	0.0050	0.00006420	102.3	0.005198	0.40	10/03/2023		

Batch 212712		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-212712											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>&lt; 0.00020</b>	0.0001	0	0	-100	100	10/03/2023	

Batch 212712		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-212712											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00519</b>	0.0050	0	103.9	85	115	10/03/2023	

Batch 212712		SampType: MS		Units mg/L							Date Analyzed
SampID: 23091473-025CMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00515</b>	0.0050	0.00006360	101.8	75	125	10/03/2023	

Batch 212712		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 23091473-025CMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Mercury		0.00020		<b>0.00528</b>	0.0050	0.00006360	104.4	0.005151	2.52	10/03/2023		



## Receiving Check List

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

Client: Ramboll

Work Order: 23091473

Client Project: JOP-23Q3

Report Date: 16-Nov-23

Carrier: Frank Barthol

Received By: MBP

Completed by:

*Amber Dilallo*

Reviewed by:

*Ellie Hopkins*

On:

On:

26-Sep-23

29-Sep-23

Amber Dilallo

Ellie Hopkins

Pages to follow:

Chain of custody

11

Extra pages included

0

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Temp °C <b>5.6</b>
Type of thermal preservation?	None <input type="checkbox"/>	Ice <input checked="" type="checkbox"/>	Blue Ice <input type="checkbox"/>	Dry Ice <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Reported field parameters measured:	Field <input checked="" type="checkbox"/>	Lab <input type="checkbox"/>	NA <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		

*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 <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials <input checked="" type="checkbox"/>
Water - TOX containers have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No TOX containers <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
NPDES/CWA TCN interferences checked/treated in the field?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

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

pH strip #90719. - amberdilallo - 9/26/2023 5:01:57 PM

pH strip #90719. - amberdilallo - 9/28/2023 9:07:58 AM

Samples collected on 9/27/23 were delivered to the laboratory on 9/27/23 at 1842 (on ice 5.6C - LTG1). AMD/ERH 9/28/23

pH strip #90719. - amberdilallo - 9/29/2023 8:00:30 AM

Samples collected on 9/28/23 were delivered to the laboratory on 9/28/23 at 1505 (on ice 5.8C - LTG1). AMD/ERH 9/29/23

Samples collected on 9/28/23 (G107 and G151) were delivered to the laboratory on 9/29/23 at 0930 (on ice 5.6C - LTG5). Samples were collected in unpreserved containers. Nitric Acid (92447) preservative was added to G107 upon arrival. G151 was split, filtered for the dissolved parameters, and preserved with Nitric Acid (92447) and Sulfuric Acid (90128). - Imaddox - 9/29/2023 12:32:04 PM

Samples collected on 9/28/23 were delivered to the laboratory on 9/28/23 at 0930 (on ice 5.6C - LTG5). LM/ERH 9/29/23

### CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		<b>REGULATORY AGENCY</b> NPDES      GROUND WATER      DRINKING WATER UST      RCRA      OTHER Site Location: IL STATE:					
Company: <u>Vistra Corp-Joppa</u>		Report To: <u>Brian Voelker/Sam Davies</u>		Attention: <u>Roger Faughn</u>							
Address: <u>2100 Portland Road</u>		Copy To: <u>Roger Faughn</u>		Company Name: <u>Vistra Corp</u>							
Email To: <u>Brian.Voelker@VistraCorp.com</u>		<u>roger.faughn@vistracorp.com</u>		Address: <u>see Section A</u>							
<u>samantha.davies@vistracorp.com</u>		Purchase Order No.:		Quote Reference:							
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:							
Requested Due Date/TAT: <b>10 day</b>		Project Number: <u>2285</u>		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 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)	Project No./ Lab I.D.
					DATE	TIME			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other		JOP-257-401	JOP-257-402	JOP-845-401	JOP-PCMP-401	JOP-SUP-000					
1	G01D				9/25/23	1307	6	2	2	2																	23091473-001
2	G02D				9/25/23	1406	6	2	2	2																	002
3	G03				9/26/23	1235	6	2	2	2																	003
4	G05						6	2	2	2																	004
5	G06						6	2	2	2																	005
6	G07						6	2	2	2																	006
7	G08						6	2	2	2																	007
8	G09						6	2	2	2																	008
9	G10						6	2	2	2																	009
10	G101-LF						2	1	1																		010
11	G102						2	1	1																		011
12	G105						2	1	1																		012
13	G107						2	1	1																		013
14	G109						2	1	1																		014
15	G11				9/26/23	1147	6	2	2	2																	015
16	G111-LF						2	1	1																		016

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
<b>JOP-23Q3 Rev 2</b>	<i>Jenny Carrall</i>	9/26/23	1315	<i>FB</i>	9.26.23	1315	5.0L	Y	N	Y
	<i>FB</i>	9.26.23	1600	<i>Monique Perin</i>	9/26/23	1600				

PH checked 90719-MD  
9/26

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>Jenny Carrall</i>				
SIGNATURE of SAMPLER:	<i>Jenny Carrall</i>	DATE Signed (MM/DD/YY):	9/26/23		

LTA5

# CHAIN-OF-CUSTODY / Analytical Request Document

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

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

JOP-257-401

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: Vistra Corp-Joppa		Report To: Brian Voelker/Sam Davies		Attention: Roger Faughn	
Address: 2100 Portland Road		Copy To: Roger Faughn		Company Name: Vistra Corp	
Email To: Brian.Voelker@VistraCorp.com		roger.faughn@vistracorp.com		Address: see Section A	
samantha.davies@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 #:	

<b>REGULATORY AGENCY</b>		
NPDES	GROUND WATER	DRINKING WATER
UST	RCRA	OTHER
Site Location	IL	
STATE:		

ITEM #	Section D Required Client Information  <b>SAMPLE ID</b> (A-Z, 0-9 / , -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX CODE	COLLECTED DATE TIME	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.	
						Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol		Other	JOP-257-401	JOP-257-402	JOP-845-401	JOP-PGMP-401			JOP-SUP-000
1	G12D				6	2	2	2											23291473-017		
2	G12S				6	2	2	2											018		
3	G13D				6	2	2	2											019		
4	G13S				6	2	2	2											020		
5	G151				6	2	2	2											021		
6	G153				6	2	2	2											022		
7	G16S				6	2	2	2											023		
8	G18S				6	2	2	2											024		
9	G19D				6	2	2	2											025		
10	G19S				6	2	2	2											026		
11	G20D				6	2	2	2											027		
12	G20S				6	2	2	2											028		
13	G21D				6	2	2	2											029		
14	G21S				6	2	2	2											030		
15	G22D				6	2	2	2											031		
16	G22S				6	2	2	2											032		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
JOP-23Q3 Rev 2	Tracy Carroll	9/26/23	1315	FB	9.26	1315	
	FB	9.26.23	1600	Morgan Petrus	9/26/23	1600	

Ph checked 90719- MP 9/26

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		DATE Signed (MM/DD/YY): 9/26/23					
SIGNATURE of SAMPLER: Tracy Carroll							

# CHAIN-OF-CUSTODY / Analytical Request Document

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

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

JOP-257-401

**Section A**  
Required Client Information:

**Section B**  
Required Project Information:

**Section C**  
Invoice Information:

Page: **3** of **3**

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	COLLECTED	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Requested Analysis Filtered (Y/N)					Residual Chlorine (Y/N)	Project No./ Lab I.D.		
								MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Analysis Test ↓	Y/N	Y/N			Y/N	Y/N
1	G23S						6	✓	✓	✓												23091473-033		
2	G24S						6	✓	✓	✓												034		
3	G51D			9/25/23	1536		6	✓	✓	✓												035		
4	G52D			9/26/23	1030		6	✓	✓	✓												036		
5	G53D						6	✓	✓	✓												037		
6	G54D			9/26/23	1235		6	✓	✓	✓												038		
7	SG02						0															039		
8	Well 2			9/26/23	0908		6	✓	✓	✓												040		
9	Well 3			9/26/23	0958		6	✓	✓	✓												041		
10	XPW01			9/26/23	926		6	✓	✓	✓												042		
11	XPW02			9/26/23	1011		6	✓	✓	✓												043		
12	XPW03			9/26/23	1051		6	✓	✓	✓												044		
13	XSG01						0															045		
14	Field Blank						6	✓	✓	✓												046		
15	G52D Duplicate			9/26/23	1030		6	✓	✓	✓												047		
16	G12S Duplicate						6	✓	✓	✓												048		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
<b>JOP-23Q3 Rev 2</b>	<i>Tracy Council</i>	9/26/23	1315	<i>FB</i>	9.26.23	1315				
	<i>FB</i>	9.26.23	1600	<i>Morgan Peterson</i>	9/26/23	1600				

*PH checked 90719-11P 9/26*

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER:	<i>Tracy Council</i>	DATE Signed (MM/DD/YY):	9/26/23
SIGNATURE of SAMPLER:	<i>Tracy Council</i>		
Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)



JOP-257-401  
13

### CHAIN-OF-CUSTODY / Analytical Request Document

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

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Requested Analysis Filtered (Y/N)					Residual Chlorine (Y/N)	Project No./ Lab I.D.	
							Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Analysis Test ↓	JOP-257-401	JOP-257-402	JOP-845-401	JOP-PGMP-401	JOP-SUP-000				
																					DRINKING WATER DW			WATER WT
1	G01D					6	2	2	2															23091493-021
2	G02D					6	2	2	2															022
3	G03					6	2	2	2															023
4	G05		9/21/23	10:4		6	2	2	2															024
5	G06		9/21/23	11:16		6	2	2	2															025
6	G07		9/21/23	11:53		6	2	2	2															026
7	G08		9/26/23	14:32		6	2	2	2															027
8	G09		9-26-23	14:10		6	2	2	2															028
9	G10		9-26-23	13:32		6	2	2	2															029
10	G101-LF		9-27-23	13:06		2	1	1																010
11	G102		9-27-23	10:14		2	1	1																011
12	G105		9-27-23	09:03		2	1	1																012
13	G107 Dry during purge		9-27-23	dry		2	1	1																013
14	G109		9-26-23	15:28		2	1	1																014
15	G11					6	2	2	2															015
16	G111-LF		9-26-23	14:57		2	1	1																016

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
JOP-23Q3 Rev 2	J. Goff	9-27	1842	Justin Goff	9/27/23	1842	5.6	Y	N	Y

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:	SIGNATURE of SAMPLER:				
Justin Goff	[Signature]				
DATE Signed (MM/DD/YY):					
9-27-23					

PH ✓ 907A  
LTCU  
011812

### CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: <u>Vistra Corp-Joppa</u>		Report To: <u>Brian Voelker/Sam Davies</u>		Attention: <u>Roger Faughn</u>	
Address: <u>2100 Portland Road</u>		Copy To: <u>Roger Faughn</u>		Company Name: <u>Vistra Corp</u>	
Email To: <u>Brian.Voelker@VistraCorp.com</u>		<u>roger.faughn@vistracorp.com</u>		Address: <u>see Section A</u>	
<u>samantha.davies@vistracorp.com</u>		Purchase Order No.:		Quote Reference:	
Phone: <u>(217) 753-8911</u>	Fax:	Project Name:		Project Manager:	
Requested Due Date/TAT: <b>10 day</b>		Project Number: <u>2285</u>		Profile #:	

REGULATORY AGENCY		
NPDES	GROUND WATER	DRINKING WATER
UST	RCRA	OTHER
Site Location		IL
STATE:		

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 <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other		Y/N	Y/N	Y/N	Y/N	Y/N			
																									JOP-257-401
1	G12D							6	2	2	2														23291473-017
2	G12S							6	2	2	2														018
3	G13D				9/27/23	13:37		6	2	2	2														019
4	G13S				9/27/23	13:14		6	2	2	2														020
5	G151							6	2	2	2														021
6	G153				9/27/23	9:04		6	2	2	2														022
7	G16S				9-27-23	13:42		6	2	2	2														023
8	G18S				9-27-23	11:49		6	2	2	2														024
9	G19D							6	2	2	2														025
10	G19S							6	2	2	2														026
11	G20D				9-27-23	14:23		6	2	2	2														027
12	G20S				9-27-23	14:42		6	2	2	2														028
13	G21D				9/27/23	14:49		6	2	2	2														029
14	G21S				9/27/23	14:26		6	2	2	2														030
15	G22D							6	2	2	2														031
16	G22S							6	2	2	2														032

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
JOP-23Q3 Rev 2	J. Colp	9/27	18:42	Omber Ojala	9/27/23	18:42	

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:	<i>Justin Colp</i>				
DATE Signed (MM/DD/YY):		9-27-23			

23091473  
JOP-257-401

### CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		Page: 3 of 3	
Company: <u>Vistra Corp-Joppa</u>		Report To: <u>Brian Voelker/Sam Davies</u>		Attention: <u>Roger Faughn</u>		<b>REGULATORY AGENCY</b>	
Address: <u>2100 Portland Road</u>		Copy To: <u>Roger Faughn</u>		Company Name: <u>Vistra Corp</u>			
Email To: <u>Brian.Voelker@VistraCorp.com</u>		<u>roger.faughn@vistracorp.com</u>		Address: <u>see Section A</u>		NPDES      GROUND WATER      DRINKING WATER	
<u>samantha.davies@vistracorp.com</u>		Purchase Order No.:		Quote Reference:		UST      RCRA      OTHER	
Phone: (217) 753-8911      Fax:		Project Name:		Project Manager:		Site Location	
Requested Due Date/TAT: <b>10 day</b>		Project Number: <u>2285</u>		Profile #:		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 <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other		JOP-257-401	JOP-257-402	JOP-845-401	JOP-PGMP-401	JOP-SUP-000			
1	G23S				9-27-23	12:32		6	2	2	2														23091473-033
2	G24S							6	2	2	2														034
3	G51D							6	2	2	2														035
4	G52D							6	2	2	2														036
5	G53D				9/27/23	931		6	2	2	2														037
6	G54D							6	2	2	2														038
7	SG02							0																	039
8	Well 2							6	2	2	2														040
9	Well 3							6	2	2	2														041
10	XPW01							6	2	2	2														042
11	XPW02							6	2	2	2														043
12	XPW03							6	2	2	2														044
13	XSG01							0																	045
14	Field Blank							6	2	2	2														046
15	G52D Duplicate							6	2	2	2														047
16	G12S Duplicate							6	2	2	2														048

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
JOP-23Q3 Rev 2	J. Colp	9-27	1842	Justin Colp	9/27/23	1842	

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:	SIGNATURE of SAMPLER:				
Justin Colp	<i>[Signature]</i>				
	DATE Signed (MM/DD/YY):				
	9-27-23				

230914 973  
JOP-257-401

### CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		<b>REGULATORY AGENCY</b>	
Company: <u>Vistra Corp-Joppa</u>		Report To: <u>Brian Voelker/Sam Davies</u>		Attention: <u>Roger Faughn</u>		NPDES    GROUND WATER    DRINKING WATER	
Address: <u>2100 Portland Road</u>		Copy To: <u>Roger Faughn</u>		Company Name: <u>Vistra Corp</u>		UST    RCRA    OTHER	
Email To: <u>Brian.Voelker@VistraCorp.com</u>		<u>roger.faughn@vistracorp.com</u>		Address: <u>see Section A</u>		Site Location	
<u>samantha.davies@vistracorp.com</u>		Purchase Order No.:		Quote Reference:		STATE: <u>IL</u>	
Phone: <u>(217) 753-8911</u> Fax:		Project Name:		Project Manager:			
Requested Due Date/TAT: <b>10 day</b>		Project Number: <u>2285</u>		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 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								Requested Analysis Filtered (Y/N)					Residual Chlorine (Y/N)	Project No./ Lab I.D.		
					DATE	TIME			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Analysis Test ↓	JOP-257-401	JOP-257-402	JOP-845-401	JOP-PGMP-401			JOP-SUP-000	
																									Y
1	G01D						6	2	2	2															230914 973-001
2	G02D						6	2	2	2															002
3	G03						6	2	2	2															003
4	G05						6	2	2	2															004
5	G06						10	2	2	2															005
6	G07						6	2	2	2															006
7	G08						6	2	2	2															007
8	G09						6	2	2	2															008
9	G10						6	2	2	2															009
10	G101-LF						2	1		1															010
11	G102						2	1		1															011
12	G105						2	1		1															012
13	G107						2	1		1															013
14	G109						2	1		1															014
15	G11						6	2	2	2															015
16	G111-LF						2	1		1															016

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
JOP-23Q3 Rev 2	<i>Brett Gilligan</i>	9-28-23	15:05	<i>Brett Gilligan</i>	9-28-23	15:05	58	Y	N	Y

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>Brett Gilligan</i>					
SIGNATURE of SAMPLER: <i>Brett Gilligan</i>					
DATE Signed (MM/DD/YY): <i>9-28-23</i>					

*PH V 907K*  
*Jmo 9/28/23*  
*LTG*

**CHAIN-OF-CUSTODY / Analytical Request Document**

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

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	COLLECTED	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 <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	JOP-257-401	JOP-257-402		JOP-845-401	JOP-PGMP-401	JOP-SUP-000				
						DRINKING WATER DW	WATER WT	WASTE WATER WW	PRODUCT P	SOIL/SOLID SL	OIL OL	WIPE WP	AIR AR	OTHER OT	TISSUE TS								
1	G12D		9/28/23 09:49		6	2	2	2														23291473-017	
2	G12S		9/28/23 09:19		6	2	2	2														018	
3	G13D				6	2	2	2														019	
4	G13S				6	2	2	2														020	
5	G151				6	2	2	2														021	
6	G153				6	2	2	2														022	
7	G16S				6	2	2	2														023	
8	G18S				6	2	2	2														024	
9	G19D		9-28-23 09:16		6	2	2	2														025	
10	G19S		9-28-23 09:47		6	2	2	2														026	
11	G20D				6	2	2	2														027	
12	G20S				6	2	2	2														028	
13	G21D				6	2	2	2														029	
14	G21S				6	2	2	2														030	
15	G22D		9-28-23 10:22		6	2	2	2														031	
16	G22S		9-28-23 10:13		6	2	2	2														032	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
JOP-23Q3 Rev 2	<i>Brett Gillman</i>	9-28-23	15:05	<i>Brett Gillman</i>	9-28-23	15:15	

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER:	<i>Brett Gillman</i>		
SIGNATURE of SAMPLER:	<i>Brett Gillman</i>	DATE Signed (MM/DD/YY):	9-28-23

JOP-257-401 **73**

**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:

Company: <b>Vistra Corp-Joppa</b>	Report To: <b>Brian Voelker/Sam Davies</b>	Attention: <b>Roger Faughn</b>
Address: <b>2100 Portland Road</b>	Copy To: <b>Roger Faughn</b>	Company Name: <b>Vistra Corp</b>
Email To: <b>Brian.Voelker@VistraCorp.com</b>	<b>roger.faughn@vistracorp.com</b>	Address: <b>see Section A</b>
<b>samantha.davies@vistracorp.com</b>	Purchase Order No.:	Quote Reference:
Phone: <b>(217) 753-8911</b> Fax:	Project Name:	Project Manager:
Requested Due Date/TAT: <b>10 day</b>	Project Number: <b>2285</b>	Profile #:

REGULATORY AGENCY		
NPDES	GROUND WATER	DRINKING WATER
UST	RCRA	OTHER
Site Location	<b>IL</b>	
STATE:		

ITEM #	Section D Required Client Information  <b>SAMPLE ID</b> (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/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										Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)
					DATE	TIME			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> O <sub>3</sub>	Methanol	Other	Analysis Test ↓		JOP-257-401	JOP-257-402	JOP-845-401	JOP-PGMP-401	JOP-SUP-000						
																	Y	N											
1	G23S						6	2	2	2																	23091473-033		
2	G24S				9-29-23	8 34	6	2	2	2																	034		
3	G51D						6	2	2	2																	035		
4	G52D						6	2	2	2																	036		
5	G53D						6	2	2	2																	037		
6	G54D						6	2	2	2																	038		
7	SG02						0																				039		
8	Well 2						6	2	2	2																	040		
9	Well 3						6	2	2	2																	041		
10	XPW01						6	2	2	2																	042		
11	XPW02						6	2	2	2																	043		
12	XPW03						6	2	2	2																	044		
13	XSG01						0																				045		
14	Field Blank				9-29-23	11 16	6	2	2	2																	046		
15	G52D Duplicate						6	2	2	2																	047		
16	G12S Duplicate				9-28-23	0919	6	2	2	2																	048		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS					
<b>JOP-23Q3 Rev 2</b>	<i>Brett Gilligan</i>	9-28-23	15:05	<i>Brett Gilligan</i> <small>TE S&amp;S 10/5/23</small>	9-28-23	15:05	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)		
				<i>Brett Gilligan</i>	9-28-23							



# CHAIN-OF-CUSTODY / Analytical Request Document

ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 JOPPA POWER PLANT, 23091473  
 JOP-257-401

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

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

ITEM #	Section D Required Client Information  <b>SAMPLE ID</b> (A-Z, 0-9 / , -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/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								Requested Analysis Filtered (Y/N)					Residual Chlorine (Y/N)	Project No./ Lab I.D.			
					DATE	TIME			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Analysis Test ↓									
																	JOP-257-401	JOP-257-402	JOP-845-401	JOP-PGMP-401	JOP-SUP-000					
1	G12D																									
2	G12S																									
3	G13D																									
4	G13S																									
5	G151				<u>09/29/23</u>	<u>1545</u>		<u>6</u>	<u>2</u>	<u>2</u>																<u>23091473-021</u>
6	G153																									
7	G16S																									
8	G18S																									
9	G19D																									
10	G19S																									
11	G20D																									
12	G20S																									
13	G21D																									
14	G21S																									
15	G22D																									
16	G22S																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
<b>JOP-23Q3 Rev 2</b>	<i>[Signature]</i>	<u>9/28/23</u>	<u>0930</u>	<i>[Signature]</i>	<u>9/29/23</u>	<u>0930</u>	

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>[Signature]</i>				
SIGNATURE of SAMPLER:	<i>[Signature]</i>	DATE Signed (MM/DD/YY):	<u>9/29/23</u>		



October 27, 2023

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-23Q3**

**WorkOrder: 23091474**

Dear Eric Bauer:

TEKLAB, INC received 19 samples on 9/28/2023 3:05:00 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](mailto:ehurley@teklabinc.com)



## Report Contents

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

**Client:** Ramboll

**Work Order:** 23091474

**Client Project:** JOP-23Q3

**Report Date:** 27-Oct-23

**This reporting package includes the following:**

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Sample Summary	26
Dates Report	27
Receiving Check List	29
Chain of Custody	Appended



## Definitions

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

**Client:** Ramboll

**Work Order:** 23091474

**Client Project:** JOP-23Q3

**Report Date:** 27-Oct-23

### 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:** 23091474

**Client Project:** JOP-23Q3

**Report Date:** 27-Oct-23

### Qualifiers

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



### Case Narrative

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

**Client:** Ramboll  
**Client Project:** JOP-23Q3

**Work Order:** 23091474  
**Report Date:** 27-Oct-23

**Cooler Receipt Temp:** 5.6 °C

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

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  
**Client Project:** JOP-23Q3

**Work Order:** 23091474  
**Report Date:** 27-Oct-23

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2024	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		1/31/2024	Collinsville
Missouri	MDNR	00930		5/31/2023	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



**Client:** Ramboll

**Work Order:** 23091474

**Client Project:** JOP-23Q3

**Report Date:** 27-Oct-23

**Lab ID:** 23091474-001

**Client Sample ID:** G01D

**Matrix:** GROUNDWATER

**Collection Date:** 09/25/2023 13:07

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:06	R338352



**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-002  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** G02D  
**Collection Date:** 09/25/2023 14:06

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:06	R338352





**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-003  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** G03  
**Collection Date:** 09/26/2023 12:35

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:06	R338352



**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-004  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** G05  
**Collection Date:** 09/27/2023 10:14

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:06	R338352



**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-005  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** G06  
**Collection Date:** 09/27/2023 11:16

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:06	R338352



**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-006  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** G07  
**Collection Date:** 09/27/2023 11:57

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:06	R338352



**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-007  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** G08  
**Collection Date:** 09/26/2023 14:32

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:07	R338352



**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-008  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** G09  
**Collection Date:** 09/26/2023 14:10

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:07	R338352



**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-009  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** G10  
**Collection Date:** 09/26/2023 13:32

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:07	R338352



**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-010  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** G11  
**Collection Date:** 09/26/2023 11:47

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:07	R338352





**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-011  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** G51D  
**Collection Date:** 09/25/2023 15:36

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:06	R338352



**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-012  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** G52D  
**Collection Date:** 09/26/2023 10:30

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:06	R338352



**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-013  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** G53D  
**Collection Date:** 09/27/2023 9:31

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:06	R338352



**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-014  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** G54D  
**Collection Date:** 09/26/2023 12:35

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:06	R338352



**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-015  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** XPW01  
**Collection Date:** 09/26/2023 9:26

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:06	R338352



**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-016  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** XPW02  
**Collection Date:** 09/26/2023 10:11

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:06	R338352



**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-017  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** XPW03  
**Collection Date:** 09/26/2023 10:51

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:06	R338352



**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-018  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** Field Blank  
**Collection Date:** 09/28/2023 11:16

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:06	R338352





**Client:** Ramboll  
**Client Project:** JOP-23Q3  
**Lab ID:** 23091474-019  
**Matrix:** GROUNDWATER

**Work Order:** 23091474  
**Report Date:** 27-Oct-23  
**Client Sample ID:** G52D Duplicate  
**Collection Date:** 09/26/2023 10:30

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	10/23/2023 12:08	R338352



## Sample Summary

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

**Client:** Ramboll  
**Client Project:** JOP-23Q3

**Work Order:** 23091474  
**Report Date:** 27-Oct-23

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
23091474-001	G01D	Groundwater	1	09/25/2023 13:07
23091474-002	G02D	Groundwater	1	09/25/2023 14:06
23091474-003	G03	Groundwater	1	09/26/2023 12:35
23091474-004	G05	Groundwater	1	09/27/2023 10:14
23091474-005	G06	Groundwater	1	09/27/2023 11:16
23091474-006	G07	Groundwater	1	09/27/2023 11:57
23091474-007	G08	Groundwater	1	09/26/2023 14:32
23091474-008	G09	Groundwater	1	09/26/2023 14:10
23091474-009	G10	Groundwater	1	09/26/2023 13:32
23091474-010	G11	Groundwater	1	09/26/2023 11:47
23091474-011	G51D	Groundwater	1	09/25/2023 15:36
23091474-012	G52D	Groundwater	1	09/26/2023 10:30
23091474-013	G53D	Groundwater	1	09/27/2023 9:31
23091474-014	G54D	Groundwater	1	09/26/2023 12:35
23091474-015	XPW01	Groundwater	1	09/26/2023 9:26
23091474-016	XPW02	Groundwater	1	09/26/2023 10:11
23091474-017	XPW03	Groundwater	1	09/26/2023 10:51
23091474-018	Field Blank	Groundwater	1	09/28/2023 11:16
23091474-019	G52D Duplicate	Groundwater	1	09/26/2023 10:30



## Dates Report

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

**Client:** Ramboll

**Work Order:** 23091474

**Client Project:** JOP-23Q3

**Report Date:** 27-Oct-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
23091474-001A	G01D	09/25/2023 13:07	09/26/2023 16:00		
See Attached for Subcontracting Analysis					10/23/2023 12:06
23091474-002A	G02D	09/25/2023 14:06	09/26/2023 16:00		
See Attached for Subcontracting Analysis					10/23/2023 12:06
23091474-003A	G03	09/26/2023 12:35	09/26/2023 16:00		
See Attached for Subcontracting Analysis					10/23/2023 12:06
23091474-004A	G05	09/27/2023 10:14	09/27/2023 18:42		
See Attached for Subcontracting Analysis					10/23/2023 12:06
23091474-005A	G06	09/27/2023 11:16	09/27/2023 18:42		
See Attached for Subcontracting Analysis					10/23/2023 12:06
23091474-006A	G07	09/27/2023 11:57	09/27/2023 18:42		
See Attached for Subcontracting Analysis					10/23/2023 12:06
23091474-007A	G08	09/26/2023 14:32	09/27/2023 18:42		
See Attached for Subcontracting Analysis					10/23/2023 12:07
23091474-008A	G09	09/26/2023 14:10	09/27/2023 18:42		
See Attached for Subcontracting Analysis					10/23/2023 12:07
23091474-009A	G10	09/26/2023 13:32	09/27/2023 18:42		
See Attached for Subcontracting Analysis					10/23/2023 12:07
23091474-010A	G11	09/26/2023 11:47	09/26/2023 16:00		
See Attached for Subcontracting Analysis					10/23/2023 12:07
23091474-011A	G51D	09/25/2023 15:36	09/26/2023 16:00		
See Attached for Subcontracting Analysis					10/23/2023 12:06
23091474-012A	G52D	09/26/2023 10:30	09/26/2023 16:00		
See Attached for Subcontracting Analysis					10/23/2023 12:06
23091474-013A	G53D	09/27/2023 9:31	09/27/2023 18:42		
See Attached for Subcontracting Analysis					10/23/2023 12:06
23091474-014A	G54D	09/26/2023 12:35	09/26/2023 16:00		
See Attached for Subcontracting Analysis					10/23/2023 12:06
23091474-015A	XPW01	09/26/2023 9:26	09/26/2023 16:00		
See Attached for Subcontracting Analysis					10/23/2023 12:06
23091474-016A	XPW02	09/26/2023 10:11	09/26/2023 16:00		
See Attached for Subcontracting Analysis					10/23/2023 12:06
23091474-017A	XPW03	09/26/2023 10:51	09/26/2023 16:00		
See Attached for Subcontracting Analysis					10/23/2023 12:06
23091474-018A	Field Blank	09/28/2023 11:16	09/28/2023 15:05		



## Dates Report

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

**Client:** Ramboll

**Work Order:** 23091474

**Client Project:** JOP-23Q3

**Report Date:** 27-Oct-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	See Attached for Subcontracting Analysis				10/23/2023 12:06
23091474-019A	G52D Duplicate	09/26/2023 10:30	09/26/2023 16:00		
	See Attached for Subcontracting Analysis				10/23/2023 12:08



## Receiving Check List

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

Client: Ramboll

Work Order: 23091474

Client Project: JOP-23Q3

Report Date: 27-Oct-23

Carrier: Frank Barthol

Received By: MBP

Completed by:

*Amber Dilallo*

Reviewed by:

*Ellie Hopkins*

On:

26-Sep-23

Amber Dilallo

On:

29-Sep-23

Ellie Hopkins

Pages to follow: Chain of custody

Extra pages included

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Temp °C <b>5.6</b>
Type of thermal preservation?	None <input type="checkbox"/>	Ice <input checked="" type="checkbox"/>	Blue Ice <input type="checkbox"/>	Dry Ice <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Reported field parameters measured:	Field <input type="checkbox"/>	Lab <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		

*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 <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials <input checked="" type="checkbox"/>
Water - TOX containers have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No TOX containers <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
NPDES/CWA TCN interferences checked/treated in the field?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

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

pH strip #90719. - amberdilallo - 9/26/2023 5:02:42 PM

pH strip #90719. - amberdilallo - 9/28/2023 9:12:51 AM

Samples collected on 9/27/23 were delivered to the laboratory on 9/27/23 at 1842 (on ice 5.6C - LTG1). AMD/ERH 9/28/23

pH strip #90719. - amberdilallo - 9/29/2023 7:57:41 AM

Samples collected on 9/28/23 were delivered to the laboratory on 9/28/23 at 1505 (on ice 5.8C - LTG1). AMD/ERH 9/29/23

# CHAIN-OF-CUSTODY / Analytical Request Document

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

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	Valid Matrix Codes CODE	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 <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other		JOP-257-401	JOP-257-402	JOP-845-401	JOP-PGMP-401	JOP-SUP-000						
1	G01D					9/25/23	1307	2																		23091474-001			
2	G02D					9/25/23	1406	2																		002			
3	G03					9/26/23	1235	2																		003			
4	G05							2																		004			
5	G06							2																		005			
6	G07							2																		006			
7	G08							2																		007			
8	G09							2																		008			
9	G10							2																		009			
10	G101-LF																												
11	G102																												
12	G105																												
13	G107																												
14	G109																												
15	G11					9/26/23	1147	2																		23091474-010			
16	G111-LF																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
<b>JOP-23Q3 Rev 2</b>	<i>Tracy Courch</i>	9/26/23	1315	<i>FB</i>	9/26/23	1315	5.4	Y	N	Y
<i>R22710/228 only</i>	<i>FB</i>	9/26/23	1600	<i>Morgan Peck</i>	9/26/23	1600				

<b>SAMPLER NAME AND SIGNATURE</b>		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	<i>Tracy Courch</i>				
SIGNATURE of SAMPLER:	<i>Tracy Courch</i>	DATE Signed (MM/DD/YY):	9/26/23		

*PH checked 90719-WP 9/26*

*U05*



# CHAIN-OF-CUSTODY / Analytical Request Document

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

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

JOP-257-401

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX    CODE	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	Project No./ Lab I.D.			
			COLLECTED	SAMPLE TEMP AT COLLECTION	Preservatives										Analysis Test ↓		
					DATE	TIME	# OF CONTAINERS	Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH				Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol
1	G23S																
2	G24S																
3	G51D			9/26/23	1530	2		2					✓	✓			23091474-011
4	G52D			9/26/23	1030	2		2					✓	✓			012
5	G53D					2		2					✓	✓			013
6	G54D			9/26/23	1235	2		2					✓	✓			014
7	SG02																
8	Well 2			9/26/23	0908												
9	Well 3			9/26/23	0958												
10	XPW01			9/26/23	926	2		2						✓			23091474-015
11	XPW02			9/26/23	1011	2		2						✓			016
12	XPW03			9/26/23	1051	2		2						✓			017
13	XSG01																
14	Field Blank					2		2						✓	✓		23091474-018
15	G52D Duplicate			9/26/23	1030	2		2						✓	✓		019
16	G12S Duplicate																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
<b>JOP-23Q3 Rev 2</b>	<i>Tracy Powell</i>	9/26/23	1315	<i>FB</i>	9.26.23	1315	
<i>Re 2319/238 only.</i>	<i>FB</i>	9.26.23	1600	<i>M. Bryan Perin</i>	9/26/23	1600	

<b>SAMPLER NAME AND SIGNATURE</b>		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	<i>Tracy Powell</i>				
SIGNATURE of SAMPLER:	<i>Tracy Powell</i>	DATE Signed (MM/DD/YY):	9/26/23		

*pn checked 90719-MWP  
9/26*





# CHAIN-OF-CUSTODY / Analytical Request Document

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

APPENDIX A.

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

Page: **2** of **3**

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	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 <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	JOP-257-401	JOP-257-402		JOP-845-401	JOP-PGMP-401	JOP-SUP-000							
1	G12D																									
2	G12S																									
3	G13D		9/22/23	1337																						
4	G13S		9/27/23	1314																						
5	G151																									
6	G153		9/22/23	904																						
7	G16S		9-27-23	1340																						
8	G18S		9-27-23	1149																						
9	G19D																									
10	G19S																									
11	G20D		9-27-23	1423																						
12	G20S		9-27-23	1442																						
13	G21D		9/27/23	1449																						
14	G21S		9/27/23	1424																						
15	G22D																									
16	G22S																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
<b>JOP-23Q3 Rev 2</b> <i>Raffie/278 only.</i>	<i>J. Gop</i>	<i>9-27-23</i>	<i>1842</i>	<i>Justin Gop</i>	<i>9/27/23</i>	<i>1842</i>	

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:	SIGNATURE of SAMPLER:				
<i>Justin Gop</i>	<i>[Signature]</i>				
DATE Signed (MM/DD/YY): <i>9-27-23</i>					

# CHAIN-OF-CUSTODY / Analytical Request Document

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

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

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 <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	↓ Analysis Test ↓	JOP-257-401		JOP-257-402	JOP-845-401	JOP-PGMP-401	JOP-SUP-000					
1	G23S				4-27-23	12:32																						
2	G24S																											
3	G51D						2		2																23091474-011			
4	G52D						2		2																212			
5	G53D				9/27/23	9:31	2		2																013			
6	G54D						2		2																014			
7	SG02																											
8	Well 2																											
9	Well 3																											
10	XPW01						2		2																23091474-015			
11	XPW02						2		2																016			
12	XPW03						2		2																017			
13	XSG01																											
14	Field Blank						2		2																23091474-018			
15	G52D Duplicate						2		2																019			
16	G12S Duplicate																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	
<b>JOP-23Q3 Rev 2</b> <i>R-221/228 only</i>	<i>J. Cold</i>	4-27	1842	<i>Justin D. Cold</i>	9/27/23	1842		

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>Justin Cold</i>					
SIGNATURE of SAMPLER:	<i>Justin Cold</i>	DATE Signed (MM/DD/YY):	9-27-23			

# CHAIN-OF-CUSTODY / Analytical Request Document

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

JOP-257-401  
2/28/23

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

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      OL WPE      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 ↓	Requested Analysis Filtered (Y/N)					Residual Chlorine (Y/N)	Project No./ Lab I.D.		
						DATE	TIME			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other		↓	↓	↓	↓	↓			↓	↓
1	G01D							2	2																23091474-001		
2	G02D							2	2																002		
3	G03							2	2																003		
4	G05							2	2																004		
5	G06							2	2																005		
6	G07							2	2																006		
7	G08							2	2																007		
8	G09							2	2																008		
9	G10							2	2																009		
10	G101-LF																										
11	G102																										
12	G105																										
13	G107																										
14	G109																										
15	G11							2	2																23091474-010		
16	G111-LF																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
JOP-23Q3 Rev 2 <i>R2276/228 only.</i>	<i>Brian Voelker</i>	9/28/23	15:05	<i>Brian Voelker</i> <i>Morgan Perin</i>	9/28/23	15:05	5.8	Y	N	Y

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:	SIGNATURE of SAMPLER:				

pH 7.9079      LTC 1  
Om 9/28/23



# CHAIN-OF-CUSTODY / Analytical Request Document

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

JOP-257-401

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	COLLECTED DATE TIME	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.								
						Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other														
1	G23S																										
2	G24S		9-28-23 8:34																								
3	G51D				2													23091474-011									
4	G52D				2													012									
5	G53D				2													013									
6	G54D				2													014									
7	SG02																										
8	Well 2																										
9	Well 3																										
10	XPW01				2													23091474-015									
11	XPW02				2													016									
12	XPW03				2													017									
13	XSG01																										
14	Field Blank		9-28-23 11:16		2													23091474-018									
15	G52D Duplicate				2													019									
16	G12S Duplicate																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
JOP-23Q3 Rev 2 <i>R2221/228 only.</i>	<i>Burt Hill</i>	9-28-23	16:05	<i>Burt Hill</i>	9-28-23	15:05	
				<i>Morgan Porter</i>	9/28/23	15:05	

<b>SAMPLER NAME AND SIGNATURE</b>		Temp in °C	Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:					
SIGNATURE of SAMPLER:	DATE Signed (MM/DD/YY):				

# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 10/26/2023 5:15:50 PM

## JOB DESCRIPTION

Radium-226 and Radium-228  
SDG NUMBER 23091474

## JOB NUMBER

160-51681-1

## 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  
10/26/2023 5:15:50 PM

Authorized for release by  
Rhonda Ridenhower, Business Unit Manager  
[Rhonda.Ridenhower@et.eurofinsus.com](mailto:Rhonda.Ridenhower@et.eurofinsus.com)  
Designee for  
Jayna Awalt, Project Manager II  
[Jayna.Awalt@et.eurofinsus.com](mailto:Jayna.Awalt@et.eurofinsus.com)  
(314)298-8566





# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Case Narrative . . . . .	4
Chain of Custody . . . . .	5
Receipt Checklists . . . . .	7
Definitions/Glossary . . . . .	8
Method Summary . . . . .	9
Sample Summary . . . . .	10
Client Sample Results . . . . .	11
QC Sample Results . . . . .	21
QC Association Summary . . . . .	23
Tracer Carrier Summary . . . . .	24

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

Job ID: 160-51681-1  
SDG: 23091474

---

**Job ID: 160-51681-1**

---

**Laboratory: Eurofins St. Louis**

**Narrative**

---

**Job Narrative**  
**160-51681-1**

**Receipt**

The samples were received on 10/2/2023 12:50 PM. 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 21.2° C and 22.0° C.

**RAD**

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.

Radium-228 batch 630505

Samples were prepped at a reduced volume due to the presence of matrix interferences: 23091474-001 (160-51681-1), 23091474-004 (160-51681-4), 23091474-005 (160-51681-5), 23091474-006 (160-51681-6) and 23091474-008 (160-51681-8). The detection goal was not met due to interferences attributed to matrix. 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.



**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

Project#: 23091474

Contact: Elizabeth Hurley Email: ehurley@teklabinc.com

Requested Due Date: Standard TAT Billing/PO: 35096

Phone: 618 344-1004 ext. 33

QC Level: 3

Sampler: Cooler Temp: [ ]

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.

**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	Chain of Custody
	23091474-001	9/25/23 1307	HNO3	Groundwater	<input type="checkbox"/>
	23091474-002	9/25/23 1406	HNO3	Groundwater	<input type="checkbox"/>
	23091474-003	9/26/23 1235	HNO3	Groundwater	<input type="checkbox"/>
	23091474-004	9/27/23 1014	HNO3	Groundwater	<input type="checkbox"/>
	23091474-005	9/27/23 1116	HNO3	Groundwater	<input type="checkbox"/>
	23091474-006	9/27/23 1157	HNO3	Groundwater	<input type="checkbox"/>
	23091474-007	9/26/23 1432	HNO3	Groundwater	<input type="checkbox"/>
	23091474-008	9/26/23 1410	HNO3	Groundwater	<input type="checkbox"/>
	23091474-009	9/26/23 1332	HNO3	Groundwater	<input type="checkbox"/>
	23091474-010	9/26/23 1147	HNO3	Groundwater	<input type="checkbox"/>
	23091474-011	9/25/23 1536	HNO3	Groundwater	<input type="checkbox"/>



\*Relinquished By: *Ember Quigley* Date/Time: 9/29/23 1702

Received By: *[Signature]* Date/Time: 10/12/23 1455

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)





## Login Sample Receipt Checklist

Client: TekLab, Inc

Job Number: 160-51681-1

SDG Number: 23091474

**Login Number: 51681**

**List Number: 1**

**Creator: Awalt, Jayna K**

**List Source: Eurofins St. Louis**

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 <6mm (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: 160-51681-1  
 Job 25-46  
 SDG: 23091474

## 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

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: 160-51681-1  
 Job 25-40  
 SDG: 23091474

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-51681-1	23091474-001	Water	09/25/23 13:07	10/02/23 12:50
160-51681-2	23091474-002	Water	09/25/23 14:06	10/02/23 12:50
160-51681-3	23091474-003	Water	09/26/23 12:35	10/02/23 12:50
160-51681-4	23091474-004	Water	09/27/23 10:14	10/02/23 12:50
160-51681-5	23091474-005	Water	09/27/23 11:16	10/02/23 12:50
160-51681-6	23091474-006	Water	09/27/23 11:57	10/02/23 12:50
160-51681-7	23091474-007	Water	09/26/23 14:32	10/02/23 12:50
160-51681-8	23091474-008	Water	09/26/23 14:10	10/02/23 12:50
160-51681-9	23091474-009	Water	09/26/23 13:32	10/02/23 12:50
160-51681-10	23091474-010	Water	09/26/23 11:47	10/02/23 12:50
160-51681-11	23091474-011	Water	09/25/23 15:36	10/02/23 12:50
160-51681-12	23091474-012	Water	09/26/23 10:30	10/02/23 12:50
160-51681-13	23091474-013	Water	09/27/23 09:31	10/02/23 12:50
160-51681-14	23091474-014	Water	09/26/23 12:35	10/02/23 12:50
160-51681-15	23091474-015	Water	09/26/23 09:26	10/02/23 12:50
160-51681-16	23091474-016	Water	09/26/23 10:11	10/02/23 12:50
160-51681-17	23091474-017	Water	09/26/23 10:51	10/02/23 12:50
160-51681-18	23091474-018	Water	09/28/23 11:16	10/02/23 12:50
160-51681-19	23091474-019	Water	09/26/23 10:30	10/02/23 12:50





# 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: 160-51681-1  
 SDG: 23091474

**Client Sample ID: 23091474-001**

**Lab Sample ID: 160-51681-1**

Date Collected: 09/25/23 13:07

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.175	U	0.345	0.345	1.00	0.606	pCi/L	10/03/23 09:51	10/25/23 09:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	46.2		30 - 110					10/03/23 09:51	10/25/23 09:00	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	3.60	G	1.16	1.21	1.00	1.30	pCi/L	10/03/23 09:54	10/23/23 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	46.2		30 - 110					10/03/23 09:54	10/23/23 12:06	1
Y Carrier	81.5		30 - 110					10/03/23 09:54	10/23/23 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	3.77		1.21	1.26	5.00	1.30	pCi/L		10/25/23 16:18	1

**Client Sample ID: 23091474-002**

**Lab Sample ID: 160-51681-2**

Date Collected: 09/25/23 14:06

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.244		0.154	0.156	1.00	0.194	pCi/L	10/03/23 09:51	10/25/23 09:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					10/03/23 09:51	10/25/23 09:02	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	2.26		0.564	0.601	1.00	0.561	pCi/L	10/03/23 09:54	10/23/23 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					10/03/23 09:54	10/23/23 12:06	1
Y Carrier	81.1		30 - 110					10/03/23 09:54	10/23/23 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	2.50		0.585	0.621	5.00	0.561	pCi/L		10/25/23 16:18	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: 160-51681-1  
 Job No: 160-51681-1  
 SDG: 23091474

**Client Sample ID: 23091474-003**

**Lab Sample ID: 160-51681-3**

Date Collected: 09/26/23 12:35

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.116	U	0.154	0.154	1.00	0.257	pCi/L	10/03/23 09:51	10/25/23 09:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.1		30 - 110					10/03/23 09:51	10/25/23 09:02	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	2.12		0.746	0.771	1.00	0.905	pCi/L	10/03/23 09:54	10/23/23 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.1		30 - 110					10/03/23 09:54	10/23/23 12:06	1
Y Carrier	85.6		30 - 110					10/03/23 09:54	10/23/23 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	2.24		0.762	0.786	5.00	0.905	pCi/L		10/25/23 16:18	1

**Client Sample ID: 23091474-004**

**Lab Sample ID: 160-51681-4**

Date Collected: 09/27/23 10:14

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.257	U	0.283	0.284	1.00	0.450	pCi/L	10/03/23 09:51	10/25/23 09:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	41.6		30 - 110					10/03/23 09:51	10/25/23 09:02	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	6.03	G	1.69	1.78	1.00	1.94	pCi/L	10/03/23 09:54	10/23/23 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	41.6		30 - 110					10/03/23 09:54	10/23/23 12:06	1
Y Carrier	80.4		30 - 110					10/03/23 09:54	10/23/23 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	6.29		1.71	1.80	5.00	1.94	pCi/L		10/25/23 16:18	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: 160-51681-1  
 SDG: 23091474

**Client Sample ID: 23091474-005**

**Lab Sample ID: 160-51681-5**

Date Collected: 09/27/23 11:16

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.157	U	0.229	0.229	1.00	0.391	pCi/L	10/03/23 09:51	10/25/23 09:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	50.6		30 - 110					10/03/23 09:51	10/25/23 09:02	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	2.88	G	1.03	1.06	1.00	1.22	pCi/L	10/03/23 09:54	10/23/23 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	50.6		30 - 110					10/03/23 09:54	10/23/23 12:06	1
Y Carrier	83.4		30 - 110					10/03/23 09:54	10/23/23 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	3.04		1.06	1.08	5.00	1.22	pCi/L		10/25/23 16:18	1

**Client Sample ID: 23091474-006**

**Lab Sample ID: 160-51681-6**

Date Collected: 09/27/23 11:57

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.0783	U	0.156	0.156	1.00	0.280	pCi/L	10/03/23 09:51	10/25/23 09:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		30 - 110					10/03/23 09:51	10/25/23 09:02	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	2.45	G	0.860	0.889	1.00	1.12	pCi/L	10/03/23 09:54	10/23/23 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		30 - 110					10/03/23 09:54	10/23/23 12:06	1
Y Carrier	80.0		30 - 110					10/03/23 09:54	10/23/23 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	2.53		0.874	0.903	5.00	1.12	pCi/L		10/25/23 16:18	1

Eurofins St. Louis

# Client Sample Results

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

Job ID: 160-51681-1  
 SDG: 23091474

**Client Sample ID: 23091474-007**

**Lab Sample ID: 160-51681-7**

Date Collected: 09/26/23 14:32

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.0966	U	0.154	0.155	1.00	0.269	pCi/L	10/03/23 09:51	10/25/23 09:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.9		30 - 110					10/03/23 09:51	10/25/23 09:03	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	1.58		0.657	0.673	1.00	0.874	pCi/L	10/03/23 09:54	10/23/23 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.9		30 - 110					10/03/23 09:54	10/23/23 12:07	1
Y Carrier	82.6		30 - 110					10/03/23 09:54	10/23/23 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	1.67		0.675	0.691	5.00	0.874	pCi/L		10/25/23 16:18	1

**Client Sample ID: 23091474-008**

**Lab Sample ID: 160-51681-8**

Date Collected: 09/26/23 14:10

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.173	0.173	1.00	0.284	pCi/L	10/03/23 09:51	10/25/23 09:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	56.5		30 - 110					10/03/23 09:51	10/25/23 09:04	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	2.00	G	0.917	0.936	1.00	1.25	pCi/L	10/03/23 09:54	10/23/23 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	56.5		30 - 110					10/03/23 09:54	10/23/23 12:07	1
Y Carrier	82.6		30 - 110					10/03/23 09:54	10/23/23 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	2.14		0.933	0.952	5.00	1.25	pCi/L		10/25/23 16:18	1

# 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: 160-51681-1  
 SDG: 23091474

**Client Sample ID: 23091474-009**

**Lab Sample ID: 160-51681-9**

Date Collected: 09/26/23 13:32

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.332		0.196	0.198	1.00	0.245	pCi/L	10/03/23 09:51	10/25/23 09:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.3		30 - 110					10/03/23 09:51	10/25/23 09:04	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	0.991		0.587	0.594	1.00	0.860	pCi/L	10/03/23 09:54	10/23/23 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.3		30 - 110					10/03/23 09:54	10/23/23 12:07	1
Y Carrier	83.4		30 - 110					10/03/23 09:54	10/23/23 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	1.32		0.619	0.626	5.00	0.860	pCi/L		10/25/23 16:18	1

**Client Sample ID: 23091474-010**

**Lab Sample ID: 160-51681-10**

Date Collected: 09/26/23 11:47

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.0764	U	0.102	0.102	1.00	0.170	pCi/L	10/03/23 09:51	10/25/23 09:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.4		30 - 110					10/03/23 09:51	10/25/23 09:04	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	2.37		0.604	0.642	1.00	0.637	pCi/L	10/03/23 09:54	10/23/23 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.4		30 - 110					10/03/23 09:54	10/23/23 12:07	1
Y Carrier	83.7		30 - 110					10/03/23 09:54	10/23/23 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	2.44		0.613	0.650	5.00	0.637	pCi/L		10/25/23 16:18	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: 160-51681-1  
 Job No: 160-51681-1  
 SDG: 23091474

**Client Sample ID: 23091474-011**

**Lab Sample ID: 160-51681-11**

Date Collected: 09/25/23 15:36

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.0156	U	0.141	0.141	1.00	0.284	pCi/L	10/03/23 09:51	10/25/23 09:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.1		30 - 110					10/03/23 09:51	10/25/23 09:04	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	1.55		0.595	0.612	1.00	0.735	pCi/L	10/03/23 09:54	10/23/23 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.1		30 - 110					10/03/23 09:54	10/23/23 12:06	1
Y Carrier	83.7		30 - 110					10/03/23 09:54	10/23/23 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	1.57		0.611	0.628	5.00	0.735	pCi/L		10/25/23 16:18	1

**Client Sample ID: 23091474-012**

**Lab Sample ID: 160-51681-12**

Date Collected: 09/26/23 10:30

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.280		0.161	0.163	1.00	0.202	pCi/L	10/03/23 09:51	10/25/23 09:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.4		30 - 110					10/03/23 09:51	10/25/23 09:04	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	1.42		0.546	0.562	1.00	0.700	pCi/L	10/03/23 09:54	10/23/23 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.4		30 - 110					10/03/23 09:54	10/23/23 12:06	1
Y Carrier	77.8		30 - 110					10/03/23 09:54	10/23/23 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	1.70		0.569	0.585	5.00	0.700	pCi/L		10/25/23 16:18	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: 160-51681-1  
 SDG: 23091474

**Client Sample ID: 23091474-013**

**Lab Sample ID: 160-51681-13**

Date Collected: 09/27/23 09:31

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.252		0.148	0.149	1.00	0.178	pCi/L	10/03/23 09:51	10/25/23 09:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.7		30 - 110					10/03/23 09:51	10/25/23 09:04	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	0.893		0.445	0.452	1.00	0.592	pCi/L	10/03/23 09:54	10/23/23 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.7		30 - 110					10/03/23 09:54	10/23/23 12:06	1
Y Carrier	78.5		30 - 110					10/03/23 09:54	10/23/23 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	1.14		0.469	0.476	5.00	0.592	pCi/L		10/25/23 16:18	1

**Client Sample ID: 23091474-014**

**Lab Sample ID: 160-51681-14**

Date Collected: 09/26/23 12:35

Matrix: Water

Date Received: 10/02/23 12:50

**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		0.171	0.174	1.00	0.218	pCi/L	10/03/23 09:51	10/25/23 09:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.1		30 - 110					10/03/23 09:51	10/25/23 09:10	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	0.891		0.471	0.478	1.00	0.658	pCi/L	10/03/23 09:54	10/23/23 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.1		30 - 110					10/03/23 09:54	10/23/23 12:06	1
Y Carrier	76.6		30 - 110					10/03/23 09:54	10/23/23 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	1.20		0.501	0.509	5.00	0.658	pCi/L		10/25/23 16:18	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: 160-51681-1  
 Job No: 160-51681-1  
 SDG: 23091474

**Client Sample ID: 23091474-015**

**Lab Sample ID: 160-51681-15**

Date Collected: 09/26/23 09:26

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.378		0.231	0.234	1.00	0.312	pCi/L	10/03/23 09:51	10/25/23 09:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.8		30 - 110					10/03/23 09:51	10/25/23 09:10	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	0.959		0.592	0.599	1.00	0.875	pCi/L	10/03/23 09:54	10/23/23 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.8		30 - 110					10/03/23 09:54	10/23/23 12:06	1
Y Carrier	82.6		30 - 110					10/03/23 09:54	10/23/23 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	1.34		0.635	0.643	5.00	0.875	pCi/L		10/25/23 16:18	1

**Client Sample ID: 23091474-016**

**Lab Sample ID: 160-51681-16**

Date Collected: 09/26/23 10:11

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.184	U	0.186	0.187	1.00	0.295	pCi/L	10/03/23 09:51	10/25/23 09:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		30 - 110					10/03/23 09:51	10/25/23 09:10	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	1.22		0.543	0.554	1.00	0.728	pCi/L	10/03/23 09:54	10/23/23 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		30 - 110					10/03/23 09:54	10/23/23 12:06	1
Y Carrier	80.4		30 - 110					10/03/23 09:54	10/23/23 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	1.40		0.574	0.585	5.00	0.728	pCi/L		10/25/23 16:18	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: 160-51681-1  
 Job No: 160-51681-1  
 SDG: 23091474

**Client Sample ID: 23091474-017**

**Lab Sample ID: 160-51681-17**

Date Collected: 09/26/23 10:51

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.0574	U	0.114	0.114	1.00	0.207	pCi/L	10/03/23 09:51	10/25/23 09:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.5		30 - 110					10/03/23 09:51	10/25/23 09:10	1

**Method: EPA 904.0 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.820</b>		0.401	0.408	1.00	0.520	pCi/L	10/03/23 09:54	10/23/23 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.5		30 - 110					10/03/23 09:54	10/23/23 12:06	1
Y Carrier	84.9		30 - 110					10/03/23 09:54	10/23/23 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
<b>Radium 226 and 228</b>	<b>0.878</b>		0.417	0.424	5.00	0.520	pCi/L		10/26/23 13:57	1

**Client Sample ID: 23091474-018**

**Lab Sample ID: 160-51681-18**

Date Collected: 09/28/23 11:16

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.0288	U	0.0993	0.0993	1.00	0.192	pCi/L	10/03/23 09:51	10/25/23 09:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					10/03/23 09:51	10/25/23 09:10	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	0.310	U	0.354	0.355	1.00	0.579	pCi/L	10/03/23 09:54	10/23/23 12:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					10/03/23 09:54	10/23/23 12:06	1
Y Carrier	82.2		30 - 110					10/03/23 09:54	10/23/23 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
<b>Radium 226 and 228</b>	<b>0.339</b>	U	0.368	0.369	5.00	0.579	pCi/L		10/26/23 13:57	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: 160-51681-1  
 Job No: 40  
 SDG: 23091474

**Client Sample ID: 23091474-019**

**Lab Sample ID: 160-51681-19**

Date Collected: 09/26/23 10:30

Matrix: Water

Date Received: 10/02/23 12:50

**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	0.412		0.173	0.177	1.00	0.174	pCi/L	10/03/23 09:51	10/25/23 09:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.6		30 - 110					10/03/23 09:51	10/25/23 09:10	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	1.63		0.508	0.529	1.00	0.578	pCi/L	10/03/23 09:54	10/23/23 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.6		30 - 110					10/03/23 09:54	10/23/23 12:08	1
Y Carrier	81.5		30 - 110					10/03/23 09:54	10/23/23 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	2.04		0.537	0.558	5.00	0.578	pCi/L		10/26/23 13:57	1

# QC Sample Results

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

Job ID: 160-51681-1  
SDG: 23091474

## Method: 903.0 - Radium-226 (GFPC)

**Lab Sample ID: MB 160-630504/1-A**  
**Matrix: Water**  
**Analysis Batch: 633327**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 630504**

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.03281	U	0.0715	0.0716	1.00	0.178	pCi/L	10/03/23 09:51	10/25/23 09:00	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
	%Yield	Qualifier								
Ba Carrier	89.5		30 - 110			10/03/23 09:51	10/25/23 09:00	1		

**Lab Sample ID: LCS 160-630504/2-A**  
**Matrix: Water**  
**Analysis Batch: 633327**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 630504**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	9.949		1.15	1.00	0.174	pCi/L	88	75 - 125
Carrier	LCS LCS	Limits			Prepared	Analyzed	Dil Fac		
	%Yield		Qualifier						
Ba Carrier	94.6	30 - 110							

**Lab Sample ID: 160-51681-2 DU**  
**Matrix: Water**  
**Analysis Batch: 633327**

**Client Sample ID: 23091474-002**  
**Prep Type: Total/NA**  
**Prep Batch: 630504**

Analyte	Sample Sample		DU	DU	Total	RL	MDC	Unit	RER	RER Limit
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					
Radium-226	0.244		0.5255		0.195	1.00	0.185	pCi/L	0.80	1
Carrier	DU DU	Limits			Prepared	Analyzed	Dil Fac			
	%Yield		Qualifier							
Ba Carrier	91.0	30 - 110								

## Method: 904.0 - Radium-228 (GFPC)

**Lab Sample ID: MB 160-630505/1-A**  
**Matrix: Water**  
**Analysis Batch: 632929**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 630505**

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.3289	U	0.534	0.535	1.00	0.913	pCi/L	10/03/23 09:54	10/23/23 16:49	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
	%Yield	Qualifier								
Ba Carrier	89.5		30 - 110			10/03/23 09:54	10/23/23 16:49	1		
Y Carrier	86.0		30 - 110			10/03/23 09:54	10/23/23 16:49	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: 160-51681-1  
 Job ID: 23091474  
 SDG: 23091474

## Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-630505/2-A  
 Matrix: Water  
 Analysis Batch: 632929

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 630505

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits												
Radium-228	7.78	9.425		1.57	1.00	0.969	pCi/L	121	75 - 125												
<table border="1"> <thead> <tr> <th>Carrier</th> <th>LCS %Yield</th> <th>LCS Qualifier</th> <th>Limits</th> </tr> </thead> <tbody> <tr> <td>Ba Carrier</td> <td>94.6</td> <td></td> <td>30 - 110</td> </tr> <tr> <td>Y Carrier</td> <td>83.4</td> <td></td> <td>30 - 110</td> </tr> </tbody> </table>										Carrier	LCS %Yield	LCS Qualifier	Limits	Ba Carrier	94.6		30 - 110	Y Carrier	83.4		30 - 110
Carrier	LCS %Yield	LCS Qualifier	Limits																		
Ba Carrier	94.6		30 - 110																		
Y Carrier	83.4		30 - 110																		

Lab Sample ID: 160-51681-2 DU  
 Matrix: Water  
 Analysis Batch: 632932

Client Sample ID: 23091474-002  
 Prep Type: Total/NA  
 Prep Batch: 630505

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit												
Radium-228	2.26		3.234		0.705	1.00	0.591	pCi/L	0.75	1												
<table border="1"> <thead> <tr> <th>Carrier</th> <th>DU %Yield</th> <th>DU Qualifier</th> <th>Limits</th> </tr> </thead> <tbody> <tr> <td>Ba Carrier</td> <td>91.0</td> <td></td> <td>30 - 110</td> </tr> <tr> <td>Y Carrier</td> <td>82.2</td> <td></td> <td>30 - 110</td> </tr> </tbody> </table>											Carrier	DU %Yield	DU Qualifier	Limits	Ba Carrier	91.0		30 - 110	Y Carrier	82.2		30 - 110
Carrier	DU %Yield	DU Qualifier	Limits																			
Ba Carrier	91.0		30 - 110																			
Y Carrier	82.2		30 - 110																			

APPENDIX A.  
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
**QC Association Summary** JOPPA POWER PLANT, EAST ASH POND

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

Job ID: 160-51681-1  
SDG: 23091474

**Rad**

**Prep Batch: 630504**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-51681-1	23091474-001	Total/NA	Water	PrecSep-21	
160-51681-2	23091474-002	Total/NA	Water	PrecSep-21	
160-51681-3	23091474-003	Total/NA	Water	PrecSep-21	
160-51681-4	23091474-004	Total/NA	Water	PrecSep-21	
160-51681-5	23091474-005	Total/NA	Water	PrecSep-21	
160-51681-6	23091474-006	Total/NA	Water	PrecSep-21	
160-51681-7	23091474-007	Total/NA	Water	PrecSep-21	
160-51681-8	23091474-008	Total/NA	Water	PrecSep-21	
160-51681-9	23091474-009	Total/NA	Water	PrecSep-21	
160-51681-10	23091474-010	Total/NA	Water	PrecSep-21	
160-51681-11	23091474-011	Total/NA	Water	PrecSep-21	
160-51681-12	23091474-012	Total/NA	Water	PrecSep-21	
160-51681-13	23091474-013	Total/NA	Water	PrecSep-21	
160-51681-14	23091474-014	Total/NA	Water	PrecSep-21	
160-51681-15	23091474-015	Total/NA	Water	PrecSep-21	
160-51681-16	23091474-016	Total/NA	Water	PrecSep-21	
160-51681-17	23091474-017	Total/NA	Water	PrecSep-21	
160-51681-18	23091474-018	Total/NA	Water	PrecSep-21	
160-51681-19	23091474-019	Total/NA	Water	PrecSep-21	
MB 160-630504/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-630504/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
160-51681-2 DU	23091474-002	Total/NA	Water	PrecSep-21	

**Prep Batch: 630505**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-51681-1	23091474-001	Total/NA	Water	PrecSep_0	
160-51681-2	23091474-002	Total/NA	Water	PrecSep_0	
160-51681-3	23091474-003	Total/NA	Water	PrecSep_0	
160-51681-4	23091474-004	Total/NA	Water	PrecSep_0	
160-51681-5	23091474-005	Total/NA	Water	PrecSep_0	
160-51681-6	23091474-006	Total/NA	Water	PrecSep_0	
160-51681-7	23091474-007	Total/NA	Water	PrecSep_0	
160-51681-8	23091474-008	Total/NA	Water	PrecSep_0	
160-51681-9	23091474-009	Total/NA	Water	PrecSep_0	
160-51681-10	23091474-010	Total/NA	Water	PrecSep_0	
160-51681-11	23091474-011	Total/NA	Water	PrecSep_0	
160-51681-12	23091474-012	Total/NA	Water	PrecSep_0	
160-51681-13	23091474-013	Total/NA	Water	PrecSep_0	
160-51681-14	23091474-014	Total/NA	Water	PrecSep_0	
160-51681-15	23091474-015	Total/NA	Water	PrecSep_0	
160-51681-16	23091474-016	Total/NA	Water	PrecSep_0	
160-51681-17	23091474-017	Total/NA	Water	PrecSep_0	
160-51681-18	23091474-018	Total/NA	Water	PrecSep_0	
160-51681-19	23091474-019	Total/NA	Water	PrecSep_0	
MB 160-630505/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-630505/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
160-51681-2 DU	23091474-002	Total/NA	Water	PrecSep_0	

# Tracer/Carrier Summary

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

Job ID: 160-51681-1  
SDG: 23091474

## 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)	
160-51681-1	23091474-001	46.2	
160-51681-2	23091474-002	88.0	
160-51681-2 DU	23091474-002	91.0	
160-51681-3	23091474-003	73.1	
160-51681-4	23091474-004	41.6	
160-51681-5	23091474-005	50.6	
160-51681-6	23091474-006	79.5	
160-51681-7	23091474-007	83.9	
160-51681-8	23091474-008	56.5	
160-51681-9	23091474-009	85.3	
160-51681-10	23091474-010	80.4	
160-51681-11	23091474-011	85.1	
160-51681-12	23091474-012	81.4	
160-51681-13	23091474-013	81.7	
160-51681-14	23091474-014	83.1	
160-51681-15	23091474-015	84.8	
160-51681-16	23091474-016	97.1	
160-51681-17	23091474-017	76.5	
160-51681-18	23091474-018	88.0	
160-51681-19	23091474-019	86.6	
LCS 160-630504/2-A	Lab Control Sample	94.6	
MB 160-630504/1-A	Method Blank	89.5	

**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)
160-51681-1	23091474-001	46.2	81.5
160-51681-2	23091474-002	88.0	81.1
160-51681-2 DU	23091474-002	91.0	82.2
160-51681-3	23091474-003	73.1	85.6
160-51681-4	23091474-004	41.6	80.4
160-51681-5	23091474-005	50.6	83.4
160-51681-6	23091474-006	79.5	80.0
160-51681-7	23091474-007	83.9	82.6
160-51681-8	23091474-008	56.5	82.6
160-51681-9	23091474-009	85.3	83.4
160-51681-10	23091474-010	80.4	83.7
160-51681-11	23091474-011	85.1	83.7
160-51681-12	23091474-012	81.4	77.8
160-51681-13	23091474-013	81.7	78.5
160-51681-14	23091474-014	83.1	76.6
160-51681-15	23091474-015	84.8	82.6
160-51681-16	23091474-016	97.1	80.4
160-51681-17	23091474-017	76.5	84.9

# 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: 160-51681-1  
SDG: 23091474

**Method: 904.0 - Radium-228 (GFPC) (Continued)**

**Matrix: Water**

**Prep Type: Total/NA**

## Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
160-51681-18	23091474-018	88.0	82.2
160-51681-19	23091474-019	86.6	81.5
LCS 160-630505/2-A	Lab Control Sample	94.6	83.4
MB 160-630505/1-A	Method Blank	89.5	86.0

### Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

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

Site Sampling Event	Joppa 3Q																		
LIMS Workorder	23091473																		
Technician	JR, BG, JC, TC																		
WO Sample	Well ID	Date	Time	Time (adj)	DTB (ft)	DTW (ft)	MP Elev (ft)	GW Elev (ft)	Well Condition	Sampling Device	Samling Method	Field Filtered	Appearance	Odor	Color	Turbidity (visible)	Ferrous Iron	Comments	
001A	G01D	09/25/2023	1307	1307		44.16			Good	Bladder Pump	Low Flow	Yes	Clear	None	None		0.049		
002A	G02D	09/25/2023	1406	1406		44.46			Good	Bladder Pump	Low Flow	Yes	Clear	None	None		0.021		
003A	G03	09/26/2023	1235	1235		39.49			Good	Bladder Pump	Low Flow	Yes	Cloudy	None	None		0.032		
004A	G05	09/27/2023	1014	1014		44.47			Good	Bladder Pump	Low Flow	Yes	Clear	Slight	None		0.389		
005A	G06	09/27/2023	1116	1116		41.49			Good	Bladder Pump	Low Flow	Yes	Clear	Slight	None		0.034		
006A	G07	09/27/2023	1157	1157		41.58			Good	Bladder Pump	Low Flow	Yes	Clear	None	None		0.119		
007A	G08	09/26/2023	1432	1432		32.69			Good	Bladder Pump	Low Flow	Yes	Cloudy	Slight	Lt. Brown		1.009		
008A	G09	09/26/2023	1410	1410		41.48			Good	Bladder Pump	Low Flow	Yes	Clear	None	None	None	4.126		
009A	G10	09/26/2023	1331	1331		41.8			Good	Bladder Pump	Low Flow	Yes	Clear	None	None	None	5.633		
010A	G101-LF	09/27/2023	1103	1103		43.38			Good	Bladder Pump	Low Flow	No	Cloudy	None	Rust	Heavy			
011A	G102	09/27/2023	1014	1014		59			Good	Bladder Pump	Low Flow	No	Cloudy	None	None	Slight			
012A	G105	09/27/2023	903	0903		56.18			Good	Bladder Pump	Low Flow	No	Clear	None	None	None			
013A	G107	09/28/2023	1523	1523		55.51			Needs Work	Submersible Pump	Low Flow	No						pump in well does not work	
014A	G109	09/26/2023	1528	1528		52.55			Good	Bladder Pump	Low Flow	No	Clear	None	None	None			
015A	G11	09/26/2023	1147	1147		48.69			Good	Bladder Pump	Low Flow	Yes	Clear	None	None	None	3.244		
016A	G111-LF	09/26/2023	1457	1457		50.61			Good	Bladder Pump	Low Flow	No	Clear	None	None	None			
017A	G12D	09/28/2023	949	0949		48.11			Good	Bladder Pump	Low Flow	Yes	Clear	None	None		0.446		
018A	G12S	09/28/2023	919	0919		48.17			Good	Bladder Pump	Low Flow	Yes	Clear	None	None		2.765		
019A	G13D	09/27/2023	1337	1337		42.88			Good	Bladder Pump	Low Flow	Yes	Clear	None	None		0.055		
020A	G13S	09/27/2023	1314	1314		42.9			Good	Bladder Pump	Low Flow	Yes	Clear	None	None		0.022		
021A	G151	09/28/2023	1545	1545		39.33			Good	Bailer	Low Flow								
022A	G153	09/27/2023	904	0904		37.81			Good	Bladder Pump	Low Flow	Yes	Clear	Slight	None		0.045	ODO takes awhile to drop and was still high after resetting cell	
023A	G16S	09/27/2023	1342	1342		45.58			Good	Bladder Pump	Low Flow	Yes	Clear	None	None	None			
024A	G18S	09/27/2023	1149	1149		38.88			Good	Bladder Pump	Low Flow	Yes	Clear	None	None	None	4.1		
025A	G19D	09/28/2023	916	0916		46.65			Good	Bladder Pump	Low Flow	Yes	Clear	None	None	None	1.726		
026A	G19S	09/28/2023	947	0947		46.78			Good	Bladder Pump	Low Flow	Yes	Clear	None	None	None	2.884		
027A	G20D	09/27/2023	1423	1423		45.08			Good	Bladder Pump	Low Flow	Yes	Clear	None	None	None	2.695		
028A	G20S	09/27/2023	1442	1442		44.49			Good	Bladder Pump	Low Flow	Yes	Clear	None	None	None	2.67		
029A	G21D	09/27/2023	1449	1449		46.27			Good	Bladder Pump	Low Flow	Yes	Clear	Slight	None		0.983		
030A	G21S	09/27/2023	1426	1426		46.81			Good	Bladder Pump	Low Flow	Yes	Clear	None	None		0.071		
031A	G22D	09/28/2023	1028	1028		46.99			Good	Bladder Pump	Low Flow	Yes	Clear	Slight	None		0.886		
032A	G22S	09/28/2023	1022	1022		46.84			Good	Bladder Pump	Low Flow	Yes	Clear	None	None	None	3.713		
033A	G23S	09/27/2023	1232	1232		46.06			Good	Bladder Pump	Low Flow	Yes	Clear	None	None	None	3.613		
034A	G24S	09/28/2023	834	0834		48.6			Good	Bladder Pump	Low Flow	Yes	Clear	None	None	None	3.54		
035A	G51D	09/25/2023	1536	1536		45.38			Good	Bladder Pump	Low Flow	Yes	Clear	None	None		0.067		
036A	G52D	09/26/2023	1235	1235		28.81			Good	Bladder Pump	Low Flow	Yes	Clear	None	None	Slight	3.767		
037A	G53D	09/27/2023	931	0931		39.36			Good	Bladder Pump	Low Flow	Yes	Clear	Slight	None		0.102		
038A	G54D	09/26/2023	1235	1235		43.85			Good	Bladder Pump	Low Flow	Yes	Clear	None	None	Slight	3.767		
039A	SG02	09/25/2023																Broken	
040A	well2	09/26/2023	908	0908		47.09			Good	Bladder Pump	Low Flow	Yes	Clear	None	None	None	2.377		
041A	well3	09/26/2023	958	0958		33.75			Good	Bladder Pump	Low Flow	Yes	Clear	None	None	None	3.221		
042A	XPW01	09/26/2023	926	0926		16.84			Good	Bladder Pump	Low Flow	Yes	Clear	Moderate	None		0.938		
043A	XPW02	09/26/2023	1011	1011		6.56			Good	Bladder Pump	Low Flow	Yes	Clear	Slight	None		3.702		
044A	XPW03	09/26/2023	1051	1051		14.02			Good	Bladder Pump	Low Flow	Yes	Clear	Slight	None		0.015		
045A	XSG01	09/25/2023																Insufficient water	
046A	FB	09/28/2023	1116	1116															
047A	G52DDUP	09/26/2023	1030	1030		28.81													
048A	G12SDUP	09/28/2023	919	0919		48.17													



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

Site Sampling Event	Joppa 3Q																		
LIMS Workorder	23091473																		
Technician	JR, BG, JC, TC																		
Well ID	Date	Time	Time (adj)	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	DTB (ft)	DTW (ft)	MP Elev (ft)	GW Elev (ft)	LIMS ID		
G01D	9/25/2023	13:07	1307	18.1	64.58	6.53	532.6	532.6	0.65	9.91	29.9			44.16			23091473-001A		
G02D	9/25/2023	14:06	1406	16.1	60.98	6.4	411.5	411.5	1.51	11.7	68.5			44.46			23091473-002A		
G03	9/26/2023	12:35	1235	17.8	64.04	6.43	445.4	445.4	3.89	34.57	40.2			39.49			23091473-003A		
G05	9/27/2023	10:14	1014	17.4	63.32	6.42	565.1	565.1	0.94	19.94	-16.8			44.47			23091473-004A		
G06	9/27/2023	11:16	1116	16.2	61.16	6.56	716.2	716.2	0.88	42.64	13.9			41.49			23091473-005A		
G07	9/27/2023	11:57	1157	16	60.8	6.43	847.3	847.3	0.72	13.16	31.2			41.58			23091473-006A		
G08	9/26/2023	14:32	1432	17.3	63.14	7.01	912.1	912.1	0.65	39.85	-91.5			32.69			23091473-007A		
G09	9/26/2023	14:10	1410	17.7	63.86	6.24	789.4	789.4	0.81	16.72	33.4			41.48			23091473-008A		
G10	9/26/2023	13:31	1331	17.5	63.5	6.65	1247.9	1247.9	0.47	16.33	64.8			41.8			23091473-009A		
G101-LF	9/27/2023	11:03	1103	15.6	60.08	6.45	341	341	5.81	483.78	87.6			43.38			23091473-010A		
G102	9/27/2023	10:14	1014	16.8	62.24	6.32	334.6	334.6	6.59	46.35	82.7			59			23091473-011A		
G105	9/27/2023	9:03	0903	17.8	64.04	6.17	507.5	507.5	7.06	7.99	53.6			56.18			23091473-012A		
G107	9/28/2023	15:23	1523	18.4	65.12	6.4	907.8	907.8	4.43	185.29	143.9			55.51			23091473-013A		
G109	9/26/2023	15:28	1528	18.3	64.94	6.4	313.7	313.7	5.94	8.67	76.8			52.55			23091473-014A		
G11	9/26/2023	11:47	1147	17.8	64.04	5.97	748.2	748.2	0.76	8.86	98.5			48.69			23091473-015A		
G111-LF	9/26/2023	14:57	1457	18.1	64.58	6.56	394	394	4.39	18.14	58			50.61			23091473-016A		
G12D	9/28/2023	9:49	0949	15.5	59.9	6.55	720.5	720.5	0.68	8.46	111.6			48.11			23091473-017A		
G12S	9/28/2023	9:19	0919	15.3	59.54	6.61	715.7	715.7	0.99	7.41	108.4			48.17			23091473-018A		
G13D	9/27/2023	13:37	1337	17.2	62.96	6.65	637.9	637.9	1.07	9.86	10.4			42.88			23091473-019A		
G13S	9/27/2023	13:14	1314	15.6	60.08	6.71	636.5	636.5	0.77	8.07	6.7			42.9			23091473-020A		
G151	9/28/2023	15:45	1545	18.2	64.76	5.83	423.3	423.3	7.4	129.84	173			39.33			23091473-021A		
G153	9/27/2023	9:04	0904	16.7	62.06	6.77	502	502	7.18	13.55	36.6			37.81			23091473-022A		
G16S	9/27/2023	13:42	1342	14.9	58.82	6.74	1034.8	1034.8	0.63	4.32	113.4			45.58			23091473-023A		
G18S	9/27/2023	11:49	1149	16.8	62.24	6.58	525	525	2.83	4.63	80.1			38.88			23091473-024A		
G19D	9/28/2023	9:22	0922	15.5	59.9	6.38	535.4	535.4	2.27	5.25	125.3			46.65			23091473-025A		
G19S	9/28/2023	9:44	0944	15.4	59.72	6.37	683.1	683.1	3.27	1.22	127			46.78			23091473-026A		
G20D	9/27/2023	14:23	1423	15.4	59.72	6.88	650.4	650.4	0.65	2.29	88.2			45.08			23091473-027A		
G20S	9/27/2023	14:42	1442	15.5	59.9	6.64	645.5	645.5	4.11	1.93	98.9			44.49			23091473-028A		
G21D	9/27/2023	14:49	1449	15.4	59.72	6.84	741.9	741.9	0.93	14.03	-52.3			46.27			23091473-029A		
G21S	9/27/2023	14:26	1426	15	59	6.61	866	866	1.72	9.42	34.9			46.81			23091473-030A		
G22D	9/28/2023	10:28	1028	16.6	61.88	6.53	489.7	489.7	0.76	15.7	21.7			46.99			23091473-031A		
G22S	9/28/2023	10:22	1022	15.7	60.26	6.49	547.8	547.8	2.82	3.34	111.6			46.84			23091473-032A		
G23S	9/27/2023	12:57	1257	15.7	60.26	6.6	452	452	4.04	9.3	92.4			46.06			23091473-033A		
G24S	9/28/2023	8:40	0840	16.2	61.16	6.29	491	491	3.93	7.09	143.5			48.6			23091473-034A		
G51D	9/25/2023	15:36	1536	18.4	65.12	5.45	426.1	426.1	1.75	17.36	139.2			45.38			23091473-035A		
G52D	9/26/2023	10:30	1030	15.9	60.62	6.34	462.3	462.3	0.56	3.37	54.9			28.81			23091473-036A		
G53D	9/27/2023	9:31	0931	17	62.6	6.46	489.1	489.1	0.6	10.39	-23.3			39.36			23091473-037A		
G54D	9/26/2023	12:35	1235	17.2	62.96	6.64	845.7	845.7	3.04	7.85	38.5			43.85			23091473-038A		
																	23091473-039A		
well2	9/26/2023	9:08	0908	19.3	66.74	6.14	859.5	859.5	3.47	9.78	131.1			47.09			23091473-040A		
well3	9/26/2023	9:58	0958	15.7	60.26	6.53	1066	1066	7.28	21.95	121.6			33.75			23091473-041A		
XPW01	9/26/2023	9:26	0926	18.1	64.58	8.18	937.1	937.1	0.64	7.64	-151.8			16.84			23091473-042A		
XPW02	9/26/2023	10:11	1011	17.7	63.86	7.63	4751.8	4751.8	0.51	9.86	-165.8			6.56			23091473-043A		
XPW03	9/26/2023	10:51	1051	18.5	65.3	10.82	663.1	663.1	0.68	7.96	-126			14.02			23091473-044A		
																	23091473-045A		
FB	09/28/2023	11:16	1116														23091473-046A		
G52DUP	09/26/2023	10:30	1030											28.81			23091473-047A		
G12SDUP	09/28/2023	9:19	0919											48.17			23091473-048A		

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-001A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G01D	9/25/2023	12:55	1255	44.16		18.2	64.76	6.69	539.9	539.9	1.04	10.97	29.2	
G01D	9/25/2023	12:58	1258	44.16		18.2	64.76	6.6	536.9	536.9	0.66	10.72	29.2	
G01D	9/25/2023	13:01	1301	44.16		18.1	64.58	6.56	534.6	534.6	0.62	11.64	29.4	
G01D	9/25/2023	13:04	1304	44.16		18.1	64.58	6.54	533.7	533.7	0.65	9.67	29.5	
G01D	9/25/2023	13:07	1307	44.16		18.1	64.58	6.53	532.6	532.6	0.65	9.91	29.9	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-002A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G02D	9/25/2023	14:00	1400	44.46		15.9	60.62	6.46	411.3	411.3	0.72	12.8	68.4	
G02D	9/25/2023	14:03	1403	44.46		16	60.8	6.42	411.1	411.1	1.08	12.84	68	
G02D	9/25/2023	14:06	1406	44.46		16.1	60.98	6.4	411.5	411.5	1.51	11.7	68.5	

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

Site Sampling Event	Joppa 3Q														
LIMS Workorder	23091473-003A														
Technician	JR, BG, JC, TC														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
G03	9/26/2023	11:41	1141	39.49		17.4	63.32	6.88	648.1	648.1	2.2	13.5	8.7		
G03	9/26/2023	11:44	1144	39.49		17.4	63.32	6.77	652.8	652.8	2.18	17.55	11.6		
G03	9/26/2023	11:47	1147	39.49		17.4	63.32	6.7	642.2	642.2	2.23	33.58	14.1		
G03	9/26/2023	11:50	1150	39.49		17.4	63.32	6.65	617.2	617.2	2.41	72.24	16.3		
G03	9/26/2023	11:53	1153	39.49		17.5	63.5	6.62	574.5	574.5	2.78	104.37	18.5		
G03	9/26/2023	11:56	1156	39.49		17.5	63.5	6.61	535.1	535.1	3.07	124.58	20.8		
G03	9/26/2023	11:59	1159	39.49		17.5	63.5	6.58	517.3	517.3	3.21	123.88	23.2		
G03	9/26/2023	12:02	1202	39.49		17.5	63.5	6.56	504.1	504.1	3.33	112.58	25.7		
G03	9/26/2023	12:05	1205	39.49		17.6	63.68	6.54	493.2	493.2	3.44	102.58	27.6		
G03	9/26/2023	12:08	1208	39.49		17.6	63.68	6.53	485.1	485.1	3.5	86.79	29.5		
G03	9/26/2023	12:11	1211	39.49		17.6	63.68	6.51	476.7	476.7	3.55	77.24	31		
G03	9/26/2023	12:14	1214	39.49		17.6	63.68	6.5	471.3	471.3	3.64	66.19	32.6		
G03	9/26/2023	12:17	1217	39.49		17.7	63.86	6.49	466.6	466.6	3.67	59.23	34		
G03	9/26/2023	12:20	1220	39.49		17.7	63.86	6.48	462.4	462.4	3.7	53.68	35.3		
G03	9/26/2023	12:23	1223	39.49		17.7	63.86	6.46	458.9	458.9	3.72	48.42	36.5		
G03	9/26/2023	12:26	1226	39.49		17.7	63.86	6.46	453.3	453.3	3.75	43.64	37.5		
G03	9/26/2023	12:29	1229	39.49		17.7	63.86	6.45	450.9	450.9	3.77	40.73	38.5		
G03	9/26/2023	12:32	1232	39.49		17.6	63.68	6.44	449.4	449.4	3.8	37.93	39.4		
G03	9/26/2023	12:35	1235	39.49		17.8	64.04	6.43	445.4	445.4	3.89	34.57	40.2		

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-004A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G05	9/27/2023	10:05	1005	44.47		17	62.6	6.47	577.9	577.9	0.95	24.92	-8.2	
G05	9/27/2023	10:08	1008	44.47		17	62.6	6.45	575.5	575.5	0.84	18.49	-11.4	
G05	9/27/2023	10:11	1011	44.47		17.4	63.32	6.43	571.1	571.1	0.87	17.7	-14.2	
G05	9/27/2023	10:14	1014	44.47		17.4	63.32	6.42	565.1	565.1	0.94	19.94	-16.8	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-005A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G06	9/27/2023	11:01	1101	41.49		16.3	61.34	6.6	725.1	725.1	1.2	66.11	20.6	
G06	9/27/2023	11:04	1104	41.49		16.3	61.34	6.59	720.1	720.1	1.07	61.5	18.8	
G06	9/27/2023	11:07	1107	41.49		16.3	61.34	6.57	717.5	717.5	1	52.48	17.3	
G06	9/27/2023	11:10	1110	41.49		16.3	61.34	6.57	716.5	716.5	0.95	49.37	16	
G06	9/27/2023	11:13	1113	41.49		16.3	61.34	6.56	716.2	716.2	0.91	50.61	14.9	
G06	9/27/2023	11:16	1116	41.49		16.2	61.16	6.56	716.2	716.2	0.88	42.64	13.9	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-006A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G07	9/27/2023	11:51	1151	41.58		16	60.8	6.53	845.5	845.5	0.81	14.62	35.9	
G07	9/27/2023	11:54	1154	41.58		16	60.8	6.46	837.5	837.5	0.77	13.16	33.4	
G07	9/27/2023	11:57	1157	41.58		16	60.8	6.43	847.3	847.3	0.72	13.16	31.2	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-007A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G08	9/26/2023	14:14	1414	32.69		17.4	63.32	7.01	912.7	912.7	0.68	55.04	-87.9	
G08	9/26/2023	14:17	1417	32.69		17.3	63.14	7.01	912.5	912.5	0.67	49.32	-88.7	
G08	9/26/2023	14:20	1420	32.69		17.3	63.14	7.01	913.5	913.5	0.67	46.99	-89.4	
G08	9/26/2023	14:23	1423	32.69		17.3	63.14	7.01	912.1	912.1	0.67	44.87	-89.9	
G08	9/26/2023	14:26	1426	32.69		17.3	63.14	7.01	912.2	912.2	0.65	40.79	-90.6	
G08	9/26/2023	14:29	1429	32.69		17.3	63.14	7.01	912.4	912.4	0.66	39.28	-91.1	
G08	9/26/2023	14:32	1432	32.69		17.3	63.14	7.01	912.1	912.1	0.65	39.85	-91.5	



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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-008A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G09	9/26/2023	14:01	1401	41.48		17.8	64.04	6.27	784.8	784.8	0.9	13.74	30.6	
G09	9/26/2023	14:04	1404	41.48		17.8	64.04	6.25	785.8	785.8	0.9	14.93	31.9	
G09	9/26/2023	14:07	1407	41.48		17.8	64.04	6.24	786.6	786.6	0.86	16.53	33.1	
G09	9/26/2023	14:10	1410	41.48		17.7	63.86	6.24	789.4	789.4	0.81	16.72	33.4	

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

Site Sampling Event	Joppa 3Q														
LIMS Workorder	23091473-009A														
Technician	JR, BG, JC, TC														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
G10	9/26/2023	13:19	1319	41.8		17.6	63.68	6.66	1277.2	1277.2	0.6	20.74	73.9		
G10	9/26/2023	13:22	1322	41.8		17.6	63.68	6.66	1266.3	1266.3	0.54	20.52	71.1		
G10	9/26/2023	13:25	1325	41.8		17.6	63.68	6.66	1258.6	1258.6	0.51	18.37	68.4		
G10	9/26/2023	13:28	1328	41.8		17.6	63.68	6.65	1254	1254	0.48	16.67	66.5		
G10	9/26/2023	13:31	1331	41.8		17.5	63.5	6.65	1247.9	1247.9	0.47	16.33	64.8		

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-010A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G101-LF	9/27/2023	10:57	1057	43.38		15.1	59.18	6.55	338.9	338.9	6.88	445.35	85	
G101-LF	9/27/2023	11:00	1100	43.38		15.6	60.08	6.47	341.1	341.1	5.94	498.76	86.4	
G101-LF	9/27/2023	11:03	1103	43.38		15.6	60.08	6.45	341	341	5.81	483.78	87.6	

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

Site Sampling Event	Joppa 3Q														
LIMS Workorder	23091473-011A														
Technician	JR, BG, JC, TC														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
G102	9/27/2023	9:47	0947	59		15.7	60.26	6.34	342.5	342.5	6.41	25.99	72.8		
G102	9/27/2023	9:50	0950	59		15.7	60.26	6.33	337.6	337.6	6.53	32.28	73.8		
G102	9/27/2023	9:53	0953	59		15.8	60.44	6.32	334	334	6.65	35.11	75.1		
G102	9/27/2023	9:56	0956	59		15.7	60.26	6.31	329.6	329.6	6.69	36.86	76.3		
G102	9/27/2023	9:59	0959	59		15.7	60.26	6.3	328	328	6.63	52.59	78		
G102	9/27/2023	10:02	1002	59		15.8	60.44	6.3	329.5	329.5	6.6	59.21	79		
G102	9/27/2023	10:05	1005	59		15.9	60.62	6.3	330.1	330.1	6.57	58.68	80.2		
G102	9/27/2023	10:08	1008	59		16	60.8	6.3	331.7	331.7	6.59	47.69	81.3		
G102	9/27/2023	10:11	1011	59		16.4	61.52	6.31	333.6	333.6	6.6	46.31	81.9		
G102	9/27/2023	10:14	1014	59		16.8	62.24	6.32	334.6	334.6	6.59	46.35	82.7		

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-012A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G105	9/27/2023	8:57	0857	56.18		17.9	64.22	6.18	541	541	6.77	12.34	46.3	
G105	9/27/2023	9:00	0900	56.18		17.8	64.04	6.18	517.4	517.4	6.98	10	49.8	
G105	9/27/2023	9:03	0903	56.18		17.8	64.04	6.17	507.5	507.5	7.06	7.99	53.6	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-013A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G107	9/28/2023	15:08	1508	55.51		20.4	68.72	6.01	961.8	961.8	2.54	35.07	115.9	
G107	9/28/2023	15:11	1511	55.51		18.2	64.76	6.26	903.1	903.1	3.57	228.96	124	
G107	9/28/2023	15:14	1514	55.51		18.9	66.02	6.28	902.1	902.1	3.42	204.28	130.4	
G107	9/28/2023	15:17	1517	55.51		19.3	66.74	6.31	903.1	903.1	3.38	196.2	135.2	
G107	9/28/2023	15:20	1520	55.51		19.7	67.46	6.34	905.5	905.5	3.35	192.45	138.7	
G107	9/28/2023	15:23	1523	55.51		18.4	65.12	6.4	907.8	907.8	4.43	185.29	143.9	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-014A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G109	9/26/2023	15:09	1509	52.55		20.6	69.08	6.84	330.1	330.1	8.39	8.54	53.7	
G109	9/26/2023	15:12	1512	52.55		21.5	70.7	6.78	332.2	332.2	8.28	6.55	57.1	
G109	9/26/2023	15:15	1515	52.55		22.3	72.14	6.77	333.2	333.2	8.17	5.34	59.9	
G109	9/26/2023	15:22	1522	52.55		18.2	64.76	6.44	317.5	317.5	6.37	11	72.8	
G109	9/26/2023	15:25	1525	52.55		18.1	64.58	6.41	314.7	314.7	6.14	8.26	75.2	
G109	9/26/2023	15:28	1528	52.55		18.3	64.94	6.4	313.7	313.7	5.94	8.67	76.8	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-015A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G11	9/26/2023	11:20	1120	48.69		17.7	63.86	5.99	855.3	855.3	1.42	6.34	91.4	
G11	9/26/2023	11:23	1123	48.69		17.7	63.86	5.97	835.5	835.5	1.17	11.48	92.4	
G11	9/26/2023	11:26	1126	48.69		17.6	63.68	5.97	816.8	816.8	1.04	17.99	93.3	
G11	9/26/2023	11:29	1129	48.69		17.8	64.04	5.97	805.5	805.5	0.96	24.84	94.2	
G11	9/26/2023	11:32	1132	48.69		17.6	63.68	5.97	792.6	792.6	0.9	31.49	95	
G11	9/26/2023	11:35	1135	48.69		17.7	63.86	5.96	785.7	785.7	0.86	41.49	95.7	
G11	9/26/2023	11:38	1138	48.69		17.6	63.68	5.97	776	776	0.84	45.5	96.5	
G11	9/26/2023	11:41	1141	48.69		17.7	63.86	5.97	768	768	0.81	56.29	97.2	
G11	9/26/2023	11:44	1144	48.69		17.8	64.04	5.95	757.9	757.9	0.78	5.05	99	
G11	9/26/2023	11:47	1147	48.69		17.8	64.04	5.97	748.2	748.2	0.76	8.86	98.5	



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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-016A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G111-LF	9/26/2023	14:45	1445	50.61		18.5	65.3	6.68	397.1	397.1	4.57	16.64	47.6	
G111-LF	9/26/2023	14:48	1448	50.61		18.1	64.58	6.62	395.4	395.4	4.36	17.03	51.3	
G111-LF	9/26/2023	14:51	1451	50.61		18	64.4	6.57	395	395	4.31	22.9	54.8	
G111-LF	9/26/2023	14:54	1454	50.61		18.1	64.58	6.57	394.6	394.6	4.39	18.58	56.3	
G111-LF	9/26/2023	14:57	1457	50.61		18.1	64.58	6.56	394	394	4.39	18.14	58	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-017A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G12D	9/28/2023	9:37	0937	48.11		15.5	59.9	6.65	721.3	721.3	1.12	9.41	128.7	
G12D	9/28/2023	9:40	0940	48.11		15.5	59.9	6.61	720.9	720.9	0.83	9.12	123.9	
G12D	9/28/2023	9:43	0943	48.11		15.5	59.9	6.58	720.6	720.6	0.74	9.15	119.4	
G12D	9/28/2023	9:46	0946	48.11		15.5	59.9	6.57	720.4	720.4	0.7	9.1	115.3	
G12D	9/28/2023	9:49	0949	48.11		15.5	59.9	6.55	720.5	720.5	0.68	8.46	111.6	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-018A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G12S	9/28/2023	9:01	0901	48.17		15.4	59.72	7.38	719.6	719.6	1.14	7.67	105.8	
G12S	9/28/2023	9:04	0904	48.17		15.3	59.54	7.05	717.9	717.9	1	7.59	109.9	
G12S	9/28/2023	9:07	0907	48.17		15.3	59.54	6.88	716.4	716.4	1.02	7.53	111.1	
G12S	9/28/2023	9:10	0910	48.17		15.3	59.54	6.77	716	716	1	7.49	111.5	
G12S	9/28/2023	9:13	0913	48.17		15.3	59.54	6.7	715.8	715.8	0.99	7.43	110.9	
G12S	9/28/2023	9:16	0916	48.17		15.3	59.54	6.65	715.7	715.7	0.99	7.44	109.8	
G12S	9/28/2023	9:19	0919	48.17		15.3	59.54	6.61	715.7	715.7	0.99	7.41	108.4	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-019A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G13D	9/27/2023	13:31	1331	42.88		17.3	63.14	6.71	638.5	638.5	1.67	10.08	6.3	
G13D	9/27/2023	13:34	1334	42.88		17.2	62.96	6.68	638.1	638.1	1.37	9.94	8.7	
G13D	9/27/2023	13:37	1337	42.88		17.2	62.96	6.65	637.9	637.9	1.07	9.86	10.4	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-020A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G13S	9/27/2023	13:08	1308	42.9		15.6	60.08	6.85	636.3	636.3	0.89	9.18	2.1	
G13S	9/27/2023	13:11	1311	42.9		15.5	59.9	6.76	636.8	636.8	0.82	8.16	5.2	
G13S	9/27/2023	13:14	1314	42.9		15.6	60.08	6.71	636.5	636.5	0.77	8.07	6.7	

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

Site Sampling Event	Joppa 3Q														
LIMS Workorder	23091473-021A														
Technician	JR, BG, JC, TC														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
G151	9/28/2023	15:39	1539	39.33		18.4	65.12	6.69	449.7	449.7	7.06	66.16	148.8		
G151	9/28/2023	15:42	1542	39.33		18.8	65.84	6.04	459.3	459.3	6.98	43.31	165.9		
G151	9/28/2023	15:45	1545	39.33		18.2	64.76	5.83	423.3	423.3	7.4	129.84	173		

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-022A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G153	9/27/2023	8:58	0858	37.81		16.6	61.88	6.82	498.2	498.2	7.81	12.09	35.2	
G153	9/27/2023	9:01	0901	37.81		16.6	61.88	6.8	499.8	499.8	7.62	12.36	35.6	
G153	9/27/2023	9:04	0904	37.81		16.7	62.06	6.77	502	502	7.18	13.55	36.6	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-023A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G16S	9/27/2023	13:36	1336	45.58		15	59	6.76	1032	1032	1.09	5.72	109.8	
G16S	9/27/2023	13:39	1339	45.58		15	59	6.75	1033.2	1033.2	0.77	4.48	111.9	
G16S	9/27/2023	13:42	1342	45.58		14.9	58.82	6.74	1034.8	1034.8	0.63	4.32	113.4	



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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-024A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G18S	9/27/2023	11:43	1143	38.88		16.8	62.24	6.57	525.3	525.3	3	9.72	78.5	
G18S	9/27/2023	11:46	1146	38.88		16.8	62.24	6.57	524.9	524.9	2.93	5.81	79.8	
G18S	9/27/2023	11:49	1149	38.88		16.8	62.24	6.58	525	525	2.83	4.63	80.1	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-025A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G19D	9/28/2023	9:16	0916	46.65		15.5	59.9	6.38	536.5	536.5	2.31	9.4	124.8	
G19D	9/28/2023	9:19	0919	46.65		15.5	59.9	6.38	536	536	2.28	6.7	125.1	
G19D	9/28/2023	9:22	0922	46.65		15.5	59.9	6.38	535.4	535.4	2.27	5.25	125.3	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-026A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G19S	9/28/2023	9:38	0938	46.78		15.6	60.08	6.45	681.7	681.7	3.57	3.13	126.8	
G19S	9/28/2023	9:41	0941	46.78		15.5	59.9	6.39	683.5	683.5	3.34	2.02	126.8	
G19S	9/28/2023	9:44	0944	46.78		15.4	59.72	6.37	683.1	683.1	3.27	1.22	127	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-027A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G20D	9/27/2023	14:17	1417	45.08		15.4	59.72	6.95	651.1	651.1	1.37	2.58	87.1	
G20D	9/27/2023	14:20	1420	45.08		15.4	59.72	6.9	650.5	650.5	0.9	2.79	87.8	
G20D	9/27/2023	14:23	1423	45.08		15.4	59.72	6.88	650.4	650.4	0.65	2.29	88.2	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-028A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond ( $\mu\text{S}/\text{cm}$ )	Sp Cond ( $\mu\text{mhos}/\text{cm}$ @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G20S	9/27/2023	14:36	1436	44.49		15.6	60.08	6.72	645.3	645.3	4.74	2.41	97.6	
G20S	9/27/2023	14:39	1439	44.49		15.5	59.9	6.66	645.4	645.4	4.27	2.12	98.3	
G20S	9/27/2023	14:42	1442	44.49		15.5	59.9	6.64	645.5	645.5	4.11	1.93	98.9	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-029A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G21D	9/27/2023	14:43	1443	46.27		15.4	59.72	6.89	742.5	742.5	1.34	16.36	-24	
G21D	9/27/2023	14:49	1449	46.27		15.4	59.72	6.84	741.9	741.9	0.93	14.03	-52.3	

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

Site Sampling Event	Joppa 3Q														
LIMS Workorder	23091473-030A														
Technician	JR, BG, JC, TC														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
G21S	9/27/2023	14:17	1417	46.81		15.1	59.18	6.75	856.9	856.9	2.03	10.73	40.9		
G21S	9/27/2023	14:20	1420	46.81		15	59	6.68	858.2	858.2	1.92	9.54	38.7		
G21S	9/27/2023	14:23	1423	46.81		15	59	6.64	861.7	861.7	1.81	9.2	36.7		
G21S	9/27/2023	14:26	1426	46.81		15	59	6.61	866	866	1.72	9.42	34.9		

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-031A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G22D	9/28/2023	10:19	1019	46.99		16.7	62.06	6.72	483.1	483.1	0.85	16.36	71.7	
G22D	9/28/2023	10:22	1022	46.99		16.6	61.88	6.6	488.8	488.8	0.79	17.71	46.8	
G22D	9/28/2023	10:25	1025	46.99		16.6	61.88	6.55	489.2	489.2	0.77	16.89	30.4	
G22D	9/28/2023	10:28	1028	46.99		16.6	61.88	6.53	489.7	489.7	0.76	15.7	21.7	



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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-032A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G22S	9/28/2023	10:16	1016	46.84		15.8	60.44	6.61	548.2	548.2	3.39	4.45	108.1	
G22S	9/28/2023	10:19	1019	46.84		15.7	60.26	6.52	547.5	547.5	2.92	4.09	110.2	
G22S	9/28/2023	10:22	1022	46.84		15.7	60.26	6.49	547.8	547.8	2.82	3.34	111.6	

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

Site Sampling Event	Joppa 3Q														
LIMS Workorder	23091473-033A														
Technician	JR, BG, JC, TC														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
G23S	9/27/2023	12:33	1233	46.06		16	60.8	6.64	452.8	452.8	4.09	19.6	87.6		
G23S	9/27/2023	12:36	1236	46.06		15.9	60.62	6.62	452.7	452.7	4.04	19.26	88.8		
G23S	9/27/2023	12:39	1239	46.06		15.9	60.62	6.62	452.4	452.4	4.02	18.09	89.4		
G23S	9/27/2023	12:42	1242	46.06		15.9	60.62	6.61	452.3	452.3	4.01	16.41	90		
G23S	9/27/2023	12:45	1245	46.06		15.8	60.44	6.61	452.4	452.4	4.01	14.29	90.8		
G23S	9/27/2023	12:48	1248	46.06		15.8	60.44	6.61	452.2	452.2	4.01	12.89	91.1		
G23S	9/27/2023	12:51	1251	46.06		15.8	60.44	6.6	452.1	452.1	4.02	11.19	91.5		
G23S	9/27/2023	12:54	1254	46.06		15.7	60.26	6.6	452.1	452.1	4.03	10.38	92		
G23S	9/27/2023	12:57	1257	46.06		15.7	60.26	6.6	452	452	4.04	9.3	92.4		

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-034A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G24S	9/28/2023	8:34	0834	48.6		16.1	60.98	6.3	491.6	491.6	4	9.62	145.7	
G24S	9/28/2023	8:37	0837	48.6		16.2	61.16	6.3	491.3	491.3	3.96	7.65	144.4	
G24S	9/28/2023	8:40	0840	48.6		16.2	61.16	6.29	491	491	3.93	7.09	143.5	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-035A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G51D	9/25/2023	15:27	1527	45.38		18.9	66.02	5.51	428.1	428.1	1.99	26.68	132	
G51D	9/25/2023	15:30	1530	45.38		18.6	65.48	5.48	426.6	426.6	1.8	21.22	135	
G51D	9/25/2023	15:33	1533	45.38		18.4	65.12	5.47	426.6	426.6	1.82	19.43	137.3	
G51D	9/25/2023	15:36	1536	45.38		18.4	65.12	5.45	426.1	426.1	1.75	17.36	139.2	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-036A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G52D	9/26/2023	10:24	1024	28.81		15.8	60.44	6.43	463.4	463.4	0.95	3.66	73.8	
G52D	9/26/2023	10:27	1027	28.81		15.9	60.62	6.36	462.2	462.2	0.66	3.15	62.5	
G52D	9/26/2023	10:30	1030	28.81		15.9	60.62	6.34	462.3	462.3	0.56	3.37	54.9	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-037A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G53D	9/27/2023	9:25	0925	39.36		17.1	62.78	6.56	488.4	488.4	0.78	14.07	-16.7	
G53D	9/27/2023	9:28	0928	39.36		17	62.6	6.49	489.3	489.3	0.65	13.46	-20.6	
G53D	9/27/2023	9:31	0931	39.36		17	62.6	6.46	489.1	489.1	0.6	10.39	-23.3	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-038A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G54D	9/26/2023	12:29	1229	43.85		17.2	62.96	6.63	733.3	733.3	3.01	13.53	40.2	
G54D	9/26/2023	12:32	1232	43.85		17.2	62.96	6.63	842.3	842.3	3.05	9.48	39.8	
G54D	9/26/2023	12:35	1235	43.85		17.2	62.96	6.64	845.7	845.7	3.04	7.85	38.5	

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

Site Sampling Event	Joppa 3Q
LIMS Workorder	23091473-039A
Technician	JR, BG, JC, TC

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
---------	------	------	------------	-----	----------	--------------	--------------	---------	-----------------	-------------------------	------------	-----------------	----------	--------------------

SG02



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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-040A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
well2	9/26/2023	8:44	0844	47.09		19.8	67.64	6.16	844.5	844.5	4.25	22.58	136.1	
well2	9/26/2023	8:47	0847	47.09		19.4	66.92	6.14	860.5	860.5	3.8	23.31	135.8	
well2	9/26/2023	8:50	0850	47.09		19.3	66.74	6.13	849.1	849.1	3.73	19.52	134.9	
well2	9/26/2023	8:53	0853	47.09		19.3	66.74	6.12	851.5	851.5	3.66	17.96	134.4	
well2	9/26/2023	8:56	0856	47.09		19.3	66.74	6.12	854.8	854.8	3.59	14.47	133.7	
well2	9/26/2023	8:59	0859	47.09		19.3	66.74	6.12	856.8	856.8	3.55	12.44	133.1	
well2	9/26/2023	9:02	0902	47.09		19.3	66.74	6.13	857.3	857.3	3.52	11.5	132.4	
well2	9/26/2023	9:05	0905	47.09		19.3	66.74	6.13	858.8	858.8	3.49	10.5	131.8	
well2	9/26/2023	9:08	0908	47.09		19.3	66.74	6.14	859.5	859.5	3.47	9.78	131.1	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-041A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
well3	9/26/2023	9:52	0952	33.75		15.7	60.26	6.52	1066.6	1066.6	7.28	21.51	122.3	
well3	9/26/2023	9:55	0955	33.75		15.7	60.26	6.52	1066.1	1066.1	7.28	22.43	121.9	
well3	9/26/2023	9:58	0958	33.75		15.7	60.26	6.53	1066	1066	7.28	21.95	121.6	

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-042A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
XPW01	9/26/2023	9:17	0917	16.84		17.5	63.5	7.79	921.6	921.6	0.7	9.92	-125.6	
XPW01	9/26/2023	9:20	0920	16.84		18	64.4	7.95	926.6	926.6	0.7	9.25	-135.5	
XPW01	9/26/2023	9:23	0923	16.84		18.1	64.58	8.1	935	935	0.66	8.37	-145.4	
XPW01	9/26/2023	9:26	0926	16.84		18.1	64.58	8.18	937.1	937.1	0.64	7.64	-151.8	

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

Site Sampling Event	Joppa 3Q														
LIMS Workorder	23091473-043A														
Technician	JR, BG, JC, TC														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
XPW02	9/26/2023	10:02	1002	6.56		17.8	64.04	7.52	4738.6	4738.6	0.6	16.61	-101.3		
XPW02	9/26/2023	10:05	1005	6.56		17.7	63.86	7.57	4752.8	4752.8	0.54	12.36	-134.3		
XPW02	9/26/2023	10:08	1008	6.56		17.7	63.86	7.6	4753.2	4753.2	0.52	11.09	-153.4		
XPW02	9/26/2023	10:11	1011	6.56		17.7	63.86	7.63	4751.8	4751.8	0.51	9.86	-165.8		

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-044A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
XPW03	9/26/2023	10:42	1042	14.02		17.9	64.22	10.77	658.8	658.8	0.73	9.56	-117.7	
XPW03	9/26/2023	10:45	1045	14.02		18.2	64.76	10.79	660.6	660.6	0.7	9.25	-121.1	
XPW03	9/26/2023	10:48	1048	14.02		18.4	65.12	10.81	661.5	661.5	0.69	8.38	-123.9	
XPW03	9/26/2023	10:51	1051	14.02		18.5	65.3	10.82	663.1	663.1	0.68	7.96	-126	

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

Site Sampling Event	Joppa 3Q
LIMS Workorder	23091473-045A
Technician	JR, BG, JC, TC

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
---------	------	------	------------	-----	----------	--------------	--------------	---------	-----------------	-------------------------	------------	-----------------	----------	--------------------

XSG01

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

Site Sampling Event	Joppa 3Q
LIMS Workorder	23091473-046A
Technician	JR, BG, JC, TC
Well ID	Date

Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
------	------------	-----	----------	--------------	--------------	---------	-----------------	-------------------------	------------	-----------------	----------	--------------------

FB

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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-047A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G52DDUP	9/26/2023	10:24	1024	28.8		15.8	60.44	6.43	463.4	463.4	0.95	3.66	73.8	
G52DDUP	9/26/2023	10:27	1027	28.8		15.9	60.62	6.36	462.2	462.2	0.66	3.15	62.5	
G52DDUP	9/26/2023	10:30	1030	28.8		15.9	60.62	6.34	462.3	462.3	0.56	3.37	54.9	



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

Site Sampling Event	Joppa 3Q													
LIMS Workorder	23091473-048A													
Technician	JR, BG, JC, TC													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G12SDUP	9/28/2023	9:01	0901	48.2		15.4	59.72	7.38	719.6	719.6	1.14	7.67	105.8	
G12SDUP	9/28/2023	9:04	0904	48.2		15.3	59.54	7.05	717.9	717.9	1	7.59	109.9	
G12SDUP	9/28/2023	9:07	0907	48.2		15.3	59.54	6.88	716.4	716.4	1.02	7.53	111.1	
G12SDUP	9/28/2023	9:10	0910	48.2		15.3	59.54	6.77	716	716	1	7.49	111.5	
G12SDUP	9/28/2023	9:13	0913	48.2		15.3	59.54	6.7	715.8	715.8	0.99	7.43	110.9	
G12SDUP	9/28/2023	9:16	0916	48.2		15.3	59.54	6.65	715.7	715.7	0.99	7.44	109.8	
G12SDUP	9/28/2023	9:19	0919	48.2		15.3	59.54	6.61	715.7	715.7	0.99	7.41	108.4	

**Field Analysis Log** GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
JOPPA POWER PLANT, EAST ASH POND

APPENDIX A.

Cross Reference to Sample ID	Date mm/dd/yy	Time	Temp. C	pH Results			Conductivity			Other: JOP-257-401				
				Reading 1	Reading 2	LCSD	Range Factor	Reading 1	Reading 2	DF	Read1/units	DF	Read2/unit	
LCS	9/25/23	12:31e	26.6	7.06				1413						
CCV		11:10	28.4	7.09				1428						

\*\*\*\* Field Meter ID for Temp, pH & Conductivity: Pine 49331

\*\*\*\* Field Meter ID for ( ): \_\_\_\_\_

Field Temp SOP 1156	SW846	Std Methods		Lot #		Lot #		Lot #
pH in the Field SOP 1152	9040B	4500-H B	pH 4.0 Buffer	<u>WP 285126G</u>	Conductivity Std. <u>1412</u>	<u>7461b</u>	Std. _____	_____
Field Cond. SOP 1155	9050A	2510 B	pH 7.0 Buffer	<u>WP 230501B</u>	Conductivity Std. _____	_____	Std. _____	_____
Other: _____			pH 10.0 Buffer	<u>WP 230504C</u>	Conductivity Std. _____	_____	Std. _____	_____
			pH LCS/LCSD <u>7</u>	<u>WP 230501F</u>	Conductivity LCS/LCSD _____	_____	_____	LCS/LCSD _____

		Reading	Conductivity Calibration		Reading	units		Calibration	Reading
pH Calibration	4.00	<u>4.01</u>	µS	0-199.9		µS		Std _____	Units _____
Date: <u>9/25/23</u>	7.00	<u>7.00</u>	<u>1412</u>	µS	0-1999	µS		Std _____	Units _____
Time: <u>12:20</u>	10.00	<u>9.99</u>	_____	mS	0-19.99	mS		Std _____	Units _____

Field Analyst Sig & Date: Jeany Carroll 9/25/23  
 Reviewed By & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_

Field Analyst Sig & Date: Jeany Carroll 9/25/23  
 Reviewed By & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_

Field Analyst Sig & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_

Comments:

### Field Analysis Log

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

Cross Reference to Sample ID	Date mm/dd/yy	Time	Temp. C	pH Results			Conductivity			Other: JOP-257-401				
				Reading 1	Reading 2	LCSD	Range Factor	Reading 1	Reading 2	DF	Read1/units	DF	Read2/unit	
LCS	9/26/23	8:45	22.5	7.04					(41)					
ccv	9/26/23	15:09	29.3	7.03					1420					

\*\*\*\* Field Meter ID for Temp, pH & Conductivity: Pine 49331

\*\*\*\* Field Meter ID for ( ): \_\_\_\_\_

Field Temp SOP 1156	SW846	Std Methods		Lot #		Lot #		Lot #
pH in the Field SOP 1152	9040B	4500-H B	pH 4.0 Buffer	<u>W 2307709</u>	Conductivity Std.	<u>1412</u>	<u>74610</u>	Std.
Field Cond. SOP 1155	9050A	2510 B	pH 7.0 Buffer	<u>230611F</u>	Conductivity Std.	_____	_____	Std.
Other: _____			pH 10.0 Buffer	<u>230504C</u>	Conductivity Std.	_____	_____	Std.
			pH LCS/LCSD	<u>7 230504B</u>	Conductivity LCS/LCSD	_____	_____	LCS/LCSD

	Reading	Conductivity Calibration	Reading	units	Calibration	Reading
pH Calibration	4.00	<u>4.00</u>	_____	μS	0-199.9	_____
Date: <u>9/26/23</u>	7.00	<u>7.01</u>	<u>1412</u>	μS	0-1999	<u>1412</u>
Time: <u>8:25</u>	10.00	<u>10.03</u>	_____	mS	0-19.99	_____

Field Analyst Sig & Date: Juanj Carral 9/26/23  
 Reviewed By & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_

Field Analyst Sig & Date: Juanj Carral 9/26/23  
 Reviewed By & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_

Field Analyst Sig & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_

Comments:

# Field Analysis Log

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

Cross Reference to Sample ID	Date mm/dd/yy	Time	Temp. C	pH Results			Conductivity			Other: JOP-257-401					
				Reading 1	Reading 2	LCSD	Range Factor	Reading 1	Reading 2	DF	Read1/units	DF	Read2/unit		
LCS	9/27/23	8:40	22.9	7.04				1412							
CCV	9/27/23	1453	24.1	7.02				1453							

\*\*\*\* Field Meter ID for Temp, pH & Conductivity: Pine 49331

\*\*\*\* Field Meter ID for ( ): \_\_\_\_\_

Field Temp SOP 1156	SW846	Std Methods	2550 B	pH 4.0 Buffer	Lot #	Conductivity Std. <u>1412</u>	Lot #	Std. _____	Lot #
pH in the Field SOP 1152	9040B	4500-H B		pH 7.0 Buffer	<u>23061207</u>	Conductivity Std. _____	<u>74610</u>	Std. _____	_____
Field Cond. SOP 1155	9050A	2510 B		pH 10.0 Buffer	<u>2306110F</u>	Conductivity Std. _____	_____	Std. _____	_____
Other: _____				pH LCS/LCSD <u>7</u>	<u>230504c</u>	Conductivity Std. _____	_____	Std. _____	_____
					<u>230504B</u>	Conductivity LCS/LCSD _____	_____	LCS/LCSD _____	_____

pH Calibration	4.00	Reading <u>4.01</u>	Conductivity Calibration	μS	0-199.9	Reading _____	units	_____	Calibration	Reading
Date: <u>9/27/23</u>	7.00	<u>7.00</u>	<u>1412</u>	μS	0-1999	<u>1412</u>	μS	_____	Std. _____	Units _____
Time: <u>8:28</u>	10.00	<u>10.03</u>	_____	mS	0-19.99	_____	mS	_____	Std. _____	Units _____

Field Analyst Sig & Date: <u>Mary Carron 9/27/23</u> Reviewed By & Date: _____ Reviewed By & Date: _____	Field Analyst Sig & Date: <u>Mary Carron 9/27/23</u> Reviewed By & Date: _____ Reviewed By & Date: _____	Field Analyst Sig & Date: _____ Reviewed By & Date: _____ Reviewed By & Date: _____
--	--	---

Comments:

## Field Analysis Log

Cross Reference to Sample ID	Date mm/dd/yy	Time	Temp. C	pH Results			Conductivity			Other: _____				
				Reading 1	Reading 2	LCSD	Range Factor	Reading 1	Reading 2	DF	Read1/units	DF	Read2/units	
LCS	9-26-23	0826	20.1		7.01			1413						
CCV	9-26-23	1546	21.9		7.03			1436						

\*\*\*\* Field Meter ID for Temp, pH & Conductivity : PINE

\*\*\*\* Field Meter ID for ( ): \_\_\_\_\_

Field Temp SOP 1156	SW846	Std Methods	2550 B	pH 4.0 Buffer	WC230720G1	Conductivity Std.	_____	Std.	_____
pH in the Field SOP 1152	9040B	4500-H B		pH 7.0 Buffer	WC230616F	Conductivity Std.	1410	Std.	_____
Field Cond. SOP 1155	9050A	2510 B		pH 10.0 Buffer	WC230504C	Conductivity Std.	_____	Std.	_____
Other: _____				pH LCS/LCSD _7_	WC230504B	Conductivity LCS/LCSD	_____	LCS/LCSD	_____

pH Calibration  
 Date: 9-26-23  
 Time: 0810

Reading	_____
_____	4.00
_____	7.01
_____	9.99

Conductivity Calibration

_____	μS	0-199.9	Reading	_____	units
_____	μS	0-1999	_____	1413	μS
_____	mS	0-19.99	_____	_____	mS

\_\_\_\_\_ Calibration

Std	_____	Units	_____	Reading	_____
Std	_____	Units	_____	_____	_____
Std	_____	Units	_____	_____	_____

Field Analyst Sig & Date: [Signature] Ca 9-26-23  
 Reviewed By & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_

Field Analyst Sig & Date: 9-26-23 [Signature]  
 Reviewed By & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_

Field Analyst Sig & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_

Comments:

## Field Analysis Log

Cross Reference to Sample ID	Date mm/dd/yy	Time	Temp. C	pH Results			Conductivity			Other:				
				Reading 1	Reading 2	LCSD	Range Factor	Reading 1	Reading 2	DF	Read1/units	DF	Read2/units	
LCS	9-27-23	0821	20.2		7.00			1415						
CCV	9-27-23	1456	21.3		7.03			1429						

\*\*\*\* Field Meter ID for Temp, pH & Conductivity : PINE

\*\*\*\* Field Meter ID for ( ): \_\_\_\_\_

Field Temp SOP 1156	SW846	Std Methods	2550 B	pH 4.0 Buffer	Lot # <u>W230720G</u>	Conductivity Std. _____	Std. _____	Lot # _____	Lot # _____
pH in the Field SOP 1152	9040B	4500-H B		pH 7.0 Buffer	<u>W230616F</u>	Conductivity Std. <u>1410</u>	Std. _____	<u>04955</u>	Lot # _____
Field Cond. SOP 1155	9050A	2510 B		pH 10.0 Buffer	<u>W230504C</u>	Conductivity Std. _____	Std. _____	_____	Lot # _____
Other: _____				pH LCS/LCSD <u>7</u>	<u>W230504B</u>	Conductivity LCS/LCSD _____	Std. _____	_____	Lot # _____

pH Calibration	Reading	4.00	Conductivity Calibration	Reading	units	_____	Calibration	Reading
Date: <u>9-27-23</u>		<u>7.00</u>	_____ $\mu$ S	_____	$\mu$ S	_____	Std _____	Units _____
Time: <u>0806</u>		<u>10.01</u>	_____ $\mu$ S	_____	$\mu$ S	<u>1415</u>	Std _____	Units _____
			_____ mS	_____	mS	_____	Std _____	Units _____

Field Analyst Sig & Date: <u>[Signature] 9-27-23</u>	Field Analyst Sig & Date: <u>[Signature] 9-27-23</u>	Field Analyst Sig & Date: _____
Reviewed By & Date: _____	Reviewed By & Date: _____	Reviewed By & Date: _____
Reviewed By & Date: _____	Reviewed By & Date: _____	Reviewed By & Date: _____

Comments:

## Field Analysis Log

Cross Reference to Sample ID	Date mm/dd/yy	Time	Temp. C	pH Results			Conductivity			Other:				
				Reading 1	Reading 2	LCSD	Range Factor	Reading 1	Reading 2	DF	Read1/units	DF	Read2/units	
LCS	9-28-23	8:38	24.3	7:02	7:01			1412						
CCV	9-28-23	11:40	25.6	7:02	7:02			1410						

\*\*\*\* Field Meter ID for Temp, pH & Conductivity : PINE

\*\*\*\* Field Meter ID for (04955) :

Field Temp SOP 1156	SW846	Std Methods
pH in the Field SOP 1152	9040B	2550 B
Field Cond. SOP 1155	9050A	4500-H B
Other: _____		2510 B

	Lot #	
pH 4.0 Buffer	<u>4-00 Wc230725</u>	Conductivity Std. <u>1410</u>
pH 7.0 Buffer	<u>7-01 Wc230666</u>	Conductivity Std. _____
pH 10.0 Buffer	<u>10-00 Wc230504</u>	Conductivity Std. _____
pH LCS/LCSD __7__	<u>7-00</u>	Conductivity LCS/LCSD _____

	Lot #	
	<u>04955</u>	Std. _____
		Std. _____
		Std. _____
		LCS/LCSD _____

pH Calibration

Reading	
<u>4.00</u>	
<u>7.01</u>	
<u>10.00</u>	

Date: 9-28-23  
 Time: 8:06

Conductivity Calibration

_____	μS	0-199.9	Reading	_____	units	_____
_____	μS	0-1999	_____	_____	μS	_____
_____	mS	0-19.99	_____	_____	mS	_____

_____	Calibration	Reading
Std _____	Units _____	_____
Std _____	Units _____	_____
Std _____	Units _____	_____

Field Analyst Sig & Date: Burt [Signature] - 9-28-23  
 Reviewed By & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_

Field Analyst Sig & Date: Burt [Signature] - 9-28-23  
 Reviewed By & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_

Field Analyst Sig & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_

Comments:

### Field Analysis Log

Cross Reference to Sample ID	Date m/m/dd/yy	Time	Temp. C	pH Results			Conductivity			Other:				
				Reading 1	Reading 2	CCV	Range Factor	Reading 1	Reading 2	DF	Read1/units	DF	Read2/units	
LCS	09/29/13	1022		7.04				1460						
	↓	1442		6.98				1455						
CCV														

\*\*\*\* Field Meter ID for Temp, pH & Conductivity : \_\_\_\_\_ \*\*\*\* Field Meter ID for ( \_\_\_\_\_ ) : \_\_\_\_\_

Field Temp SOP 1156	SW846	Std Methods	Lot #	pH 4.0 Buffer	WC230720G	Conductivity Std.	_____	Std.	_____
pH in the Field SOP 1152	9040B	4500-H B		pH 7.0 Buffer	WC2301010F	Conductivity Std.	1410	Std.	_____
Field Cond. SOP 1155	9050A	2510 B		pH 10.0 Buffer	WC230504L	Conductivity Std.	_____	Std.	_____
Other: _____				pH LCS/LCSD	WC230504B	Conductivity LCS/LCSD	_____	LCS/LCSD	_____

pH Calibration

	Reading	
	4.00	4.00
Date:	7.00	7.04
Time:	10.00	9.48

Field Analyst Sig & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_

Conductivity Calibration

	Reading	units
_____	0-199.9	µS
_____	0-1999	µS
_____	0-19.99	mS

Field Analyst Sig & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_

Calibration

	Reading
Std	Units
Std	Units
Std	Units

Field Analyst Sig & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_  
 Reviewed By & Date: \_\_\_\_\_

Comments:



November 20, 2023

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-23Q4**

**WorkOrder: 23100903**

Dear Eric Bauer:

TEKLAB, INC received 18 samples for JOP\_257\_401 on 10/25/2023 5:45:00 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](mailto:ehurley@teklabinc.com)



## Report Contents

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

**Client:** Ramboll

**Work Order:** 23100903

**Client Project:** JOP-23Q4

**Report Date:** 20-Nov-23

**This reporting package includes the following:**

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Quality Control Results	40
Receiving Check List	74
Chain of Custody	Appended

## Definitions

**Client:** Ramboll

**Work Order:** 23100903

**Client Project:** JOP-23Q4

**Report Date:** 20-Nov-23

### 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:** 23100903

**Client Project:** JOP-23Q4

**Report Date:** 20-Nov-23

### 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-23Q4

**Work Order:** 23100903  
**Report Date:** 20-Nov-23

**Cooler Receipt Temp:** 2.2 °C

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

SG02 is broken and could not be measured on 10/23/23. XSG01 is below the measurement level and could not be recorded on 10/23/23 at 10:10AM. EAH 10/25/23

G54S collection date/time per field file(s). EAH 10/26/23

Per Eric Bauer's request, only JOP\_257\_401 data is included in this report. EAH 11/20/23

#### 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  
**Client Project:** JOP-23Q4

**Work Order:** 23100903  
**Report Date:** 20-Nov-23

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2024	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		1/31/2024	Collinsville
Missouri	MDNR	00930		5/31/2023	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



Client: Ramboll  
Client Project: JOP-23Q4  
Lab ID: 23100903-001  
Matrix: GROUNDWATER

Work Order: 23100903  
Report Date: 20-Nov-23

Client Sample ID: G01D

Collection Date: 10/23/2023 12:44

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		44.88	ft	1	10/23/2023 12:44	R338500
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		180	NTU	1	10/23/2023 12:44	R338500
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		103	mV	1	10/23/2023 12:44	R338500
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		484	µS/cm	1	10/23/2023 12:44	R338500
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		16.9	°C	1	10/23/2023 12:44	R338500
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		1.83	mg/L	1	10/23/2023 12:44	R338500
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.40		1	10/23/2023 12:44	R338500
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		242	mg/L	1	10/27/2023 11:51	R338399
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	10/27/2023 11:51	R338399
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		308	mg/L	1	10/26/2023 14:34	R338395
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	6	10		30	mg/L	1	10/26/2023 10:45	R338345
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.20	mg/L	1	10/26/2023 13:27	R338332
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		13	mg/L	1	10/26/2023 10:44	R338363
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		33.0	mg/L	1	10/27/2023 10:48	213822
Magnesium	NELAP	0.0055	0.0500		9.70	mg/L	1	10/27/2023 10:48	213822
Potassium	NELAP	0.0400	0.100		1.34	mg/L	1	10/27/2023 10:48	213822
Sodium	NELAP	0.0250	0.0500		77.9	mg/L	1	10/27/2023 10:48	213822
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/27/2023 19:44	213822
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/27/2023 19:44	213822
Barium	NELAP	0.0007	0.0010		0.188	mg/L	5	10/27/2023 19:44	213822
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/27/2023 19:44	213822
Boron	NELAP	0.0092	0.025	J	0.014	mg/L	5	10/27/2023 19:44	213822
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/27/2023 19:44	213822
Chromium	NELAP	0.0008	0.0015		0.0020	mg/L	5	10/30/2023 11:56	213822
Cobalt	NELAP	0.0001	0.0010	J	0.0003	mg/L	5	10/27/2023 19:44	213822
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/27/2023 19:44	213822
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	10/27/2023 19:44	213822
Molybdenum	*	0.0006	0.0015		< 0.0015	mg/L	5	10/27/2023 19:44	213822
Selenium	NELAP	0.0006	0.0010		0.0014	mg/L	5	10/27/2023 19:44	213822
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/27/2023 19:44	213822



Client: Ramboll  
Client Project: JOP-23Q4  
Lab ID: 23100903-001  
Matrix: GROUNDWATER

Work Order: 23100903  
Report Date: 20-Nov-23  
Client Sample ID: G01D  
Collection Date: 10/23/2023 12:44

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/27/2023 10:54	213831





Client: Ramboll  
Client Project: JOP-23Q4  
Lab ID: 23100903-002  
Matrix: GROUNDWATER

Work Order: 23100903  
Report Date: 20-Nov-23

Client Sample ID: G02D

Collection Date: 10/23/2023 13:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		45.10	ft	1	10/23/2023 13:35	R338500
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		91	NTU	1	10/23/2023 13:35	R338500
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		108	mV	1	10/23/2023 13:35	R338500
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		341	µS/cm	1	10/23/2023 13:35	R338500
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		15.4	°C	1	10/23/2023 13:35	R338500
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		2.90	mg/L	1	10/23/2023 13:35	R338500
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.40		1	10/23/2023 13:35	R338500
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		145	mg/L	1	10/27/2023 9:51	R338399
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	10/27/2023 9:51	R338399
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		204	mg/L	1	10/26/2023 10:33	R338395
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	6	10		15	mg/L	1	10/26/2023 10:55	R338345
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.19	mg/L	1	10/26/2023 12:50	R338332
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		22	mg/L	1	10/26/2023 10:55	R338363
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		34.0	mg/L	1	10/27/2023 10:49	213822
Magnesium	NELAP	0.0055	0.0500		9.66	mg/L	1	10/27/2023 10:49	213822
Potassium	NELAP	0.0400	0.100		1.10	mg/L	1	10/27/2023 10:49	213822
Sodium	NELAP	0.0250	0.0500		32.9	mg/L	1	10/27/2023 10:49	213822
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/27/2023 19:50	213822
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/27/2023 19:50	213822
Barium	NELAP	0.0007	0.0010		0.170	mg/L	5	10/27/2023 19:50	213822
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/27/2023 19:50	213822
Boron	NELAP	0.0092	0.0250		0.0276	mg/L	5	10/27/2023 19:50	213822
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/27/2023 19:50	213822
Chromium	NELAP	0.0008	0.0015	J	0.0009	mg/L	5	10/30/2023 12:02	213822
Cobalt	NELAP	0.0001	0.0010	J	0.0001	mg/L	5	10/27/2023 19:50	213822
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/27/2023 19:50	213822
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	10/27/2023 19:50	213822
Molybdenum	*	0.0006	0.0015		< 0.0015	mg/L	5	10/27/2023 19:50	213822
Selenium	NELAP	0.0006	0.0010		0.0012	mg/L	5	10/27/2023 19:50	213822
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/27/2023 19:50	213822



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100903-002  
**Matrix:** GROUNDWATER

**Work Order:** 23100903  
**Report Date:** 20-Nov-23  
**Client Sample ID:** G02D  
**Collection Date:** 10/23/2023 13:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/27/2023 10:57	213831



## Laboratory Results

Client: Ramboll  
Client Project: JOP-23Q4  
Lab ID: 23100903-003  
Matrix: GROUNDWATER

Work Order: 23100903  
Report Date: 20-Nov-23

Client Sample ID: G03

Collection Date: 10/23/2023 14:24

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		39.89	ft	1	10/23/2023 14:24	R338500
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		110	NTU	1	10/23/2023 14:24	R338500
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		130	mV	1	10/23/2023 14:24	R338500
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		411	µS/cm	1	10/23/2023 14:24	R338500
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		16.4	°C	1	10/23/2023 14:24	R338500
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		3.66	mg/L	1	10/23/2023 14:24	R338500
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.40		1	10/23/2023 14:24	R338500
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		138	mg/L	1	10/27/2023 10:01	R338399
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	10/27/2023 10:01	R338399
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		254	mg/L	1	10/26/2023 10:33	R338395
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	12	20		61	mg/L	2	10/26/2023 11:35	R338345
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.20	mg/L	1	10/26/2023 12:52	R338332
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		20	mg/L	1	10/26/2023 11:30	R338363
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		42.8	mg/L	1	10/27/2023 10:51	213822
Magnesium	NELAP	0.0055	0.0500		14.0	mg/L	1	10/27/2023 10:51	213822
Potassium	NELAP	0.0400	0.100		1.09	mg/L	1	10/27/2023 10:51	213822
Sodium	NELAP	0.0250	0.0500		34.1	mg/L	1	10/27/2023 10:51	213822
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/27/2023 20:35	213822
Arsenic	NELAP	0.0004	0.0010	J	0.0005	mg/L	5	10/27/2023 20:35	213822
Barium	NELAP	0.0007	0.0010		0.0652	mg/L	5	10/27/2023 20:35	213822
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/27/2023 20:35	213822
Boron	NELAP	0.0092	0.0250		0.269	mg/L	5	10/27/2023 20:35	213822
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/27/2023 20:35	213822
Chromium	NELAP	0.0008	0.0015		0.0023	mg/L	5	10/30/2023 12:07	213822
Cobalt	NELAP	0.0001	0.0010	J	0.0009	mg/L	5	10/27/2023 20:35	213822
Lead	NELAP	0.0006	0.0010	J	0.0006	mg/L	5	10/27/2023 20:35	213822
Lithium	*	0.0015	0.0030	J	0.0022	mg/L	5	10/27/2023 20:35	213822
Molybdenum	*	0.0006	0.0015		< 0.0015	mg/L	5	10/27/2023 20:35	213822
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/27/2023 20:35	213822
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/27/2023 20:35	213822



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100903-003  
**Matrix:** GROUNDWATER

**Work Order:** 23100903  
**Report Date:** 20-Nov-23  
**Client Sample ID:** G03  
**Collection Date:** 10/23/2023 14:24

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/27/2023 10:59	213831



Client: Ramboll  
Client Project: JOP-23Q4  
Lab ID: 23100903-004  
Matrix: GROUNDWATER

Work Order: 23100903  
Report Date: 20-Nov-23

Client Sample ID: G05

Collection Date: 10/24/2023 14:03

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		44.93	ft	1	10/24/2023 14:03	R338500
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		7.3	NTU	1	10/24/2023 14:03	R338500
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		45	mV	1	10/24/2023 14:03	R338500
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		460	µS/cm	1	10/24/2023 14:03	R338500
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		17.7	°C	1	10/24/2023 14:03	R338500
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		1.21	mg/L	1	10/24/2023 14:03	R338500
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.44		1	10/24/2023 14:03	R338500
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		188	mg/L	1	10/27/2023 11:56	R338399
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	10/27/2023 11:56	R338399
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		358	mg/L	1	10/27/2023 11:09	R338465
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	31	50		92	mg/L	5	10/27/2023 14:09	R338425
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.44	mg/L	1	10/26/2023 11:35	R338332
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		22	mg/L	1	10/27/2023 14:03	R338455
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		50.4	mg/L	1	10/27/2023 10:52	213822
Magnesium	NELAP	0.0055	0.0500		18.0	mg/L	1	10/27/2023 10:52	213822
Potassium	NELAP	0.0400	0.100		1.56	mg/L	1	10/27/2023 10:52	213822
Sodium	NELAP	0.0250	0.0500		41.8	mg/L	1	10/27/2023 10:52	213822
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/27/2023 20:41	213822
Arsenic	NELAP	0.0004	0.0010	J	0.0005	mg/L	5	10/27/2023 20:41	213822
Barium	NELAP	0.0007	0.0010		0.177	mg/L	5	10/27/2023 20:41	213822
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/27/2023 20:41	213822
Boron	NELAP	0.0092	0.0250		0.0485	mg/L	5	10/27/2023 20:41	213822
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/27/2023 20:41	213822
Chromium	NELAP	0.0008	0.0015		< 0.0015	mg/L	5	10/30/2023 12:13	213822
Cobalt	NELAP	0.0001	0.0010		0.0020	mg/L	5	10/27/2023 20:41	213822
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/27/2023 20:41	213822
Lithium	*	0.0015	0.0030	J	0.0023	mg/L	5	10/27/2023 20:41	213822
Molybdenum	*	0.0010	0.0015		0.0025	mg/L	5	10/31/2023 13:42	213822
Selenium	NELAP	0.0006	0.0010	J	0.0009	mg/L	5	10/27/2023 20:41	213822
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/27/2023 20:41	213822



Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

Lab ID: 23100903-004

Client Sample ID: G05

Matrix: GROUNDWATER

Collection Date: 10/24/2023 14:03

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/27/2023 11:01	213831



## Laboratory Results

Client: Ramboll  
Client Project: JOP-23Q4  
Lab ID: 23100903-005  
Matrix: GROUNDWATER

Work Order: 23100903  
Report Date: 20-Nov-23

Client Sample ID: G06

Collection Date: 10/24/2023 13:22

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		41.92	ft	1	10/24/2023 13:22	R338500
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		18	NTU	1	10/24/2023 13:22	R338500
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		116	mV	1	10/24/2023 13:22	R338500
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		593	µS/cm	1	10/24/2023 13:22	R338500
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		15.7	°C	1	10/24/2023 13:22	R338500
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.76	mg/L	1	10/24/2023 13:22	R338500
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.57		1	10/24/2023 13:22	R338500
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		168	mg/L	1	10/27/2023 12:01	R338399
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	10/27/2023 12:01	R338399
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		474	mg/L	1	10/27/2023 11:09	R338465
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		196	mg/L	10	10/27/2023 14:17	R338425
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.29	mg/L	1	10/26/2023 11:37	R338332
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		22	mg/L	1	10/27/2023 14:11	R338455
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		82.5	mg/L	1	10/27/2023 10:54	213822
Magnesium	NELAP	0.0055	0.0500		22.9	mg/L	1	10/27/2023 10:54	213822
Potassium	NELAP	0.0400	0.100		2.42	mg/L	1	10/27/2023 10:54	213822
Sodium	NELAP	0.0250	0.0500		44.6	mg/L	1	10/27/2023 10:54	213822
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/27/2023 20:46	213822
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/27/2023 20:46	213822
Barium	NELAP	0.0007	0.0010		0.0363	mg/L	5	10/27/2023 20:46	213822
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/27/2023 20:46	213822
Boron	NELAP	0.0092	0.0250		3.73	mg/L	5	10/27/2023 20:46	213822
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/27/2023 20:46	213822
Chromium	NELAP	0.0008	0.0015		0.0019	mg/L	5	10/30/2023 12:19	213822
Cobalt	NELAP	0.0001	0.0010	J	0.0007	mg/L	5	10/27/2023 20:46	213822
Lead	NELAP	0.0006	0.0010	J	0.0009	mg/L	5	10/27/2023 20:46	213822
Lithium	*	0.0015	0.0030		0.0047	mg/L	5	10/27/2023 20:46	213822
Molybdenum	*	0.0006	0.0015		< 0.0015	mg/L	5	10/27/2023 20:46	213822
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/27/2023 20:46	213822
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/27/2023 20:46	213822



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100903-005  
**Matrix:** GROUNDWATER

**Work Order:** 23100903  
**Report Date:** 20-Nov-23

**Client Sample ID:** G06  
**Collection Date:** 10/24/2023 13:22

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/27/2023 11:03	213831





Client: Ramboll  
Client Project: JOP-23Q4  
Lab ID: 23100903-006  
Matrix: GROUNDWATER

Work Order: 23100903  
Report Date: 20-Nov-23

Client Sample ID: G07

Collection Date: 10/24/2023 12:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		42.00	ft	1	10/24/2023 12:40	R338500
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		10	NTU	1	10/24/2023 12:40	R338500
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		131	mV	1	10/24/2023 12:40	R338500
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		709	µS/cm	1	10/24/2023 12:40	R338500
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		15.8	°C	1	10/24/2023 12:40	R338500
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.88	mg/L	1	10/24/2023 12:40	R338500
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.41		1	10/24/2023 12:40	R338500
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		164	mg/L	1	10/27/2023 12:06	R338399
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	10/27/2023 12:06	R338399
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		618	mg/L	1	10/27/2023 11:09	R338465
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		285	mg/L	10	10/26/2023 11:43	R338345
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.41	mg/L	1	10/26/2023 13:30	R338332
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		21	mg/L	1	10/26/2023 11:38	R338363
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		95.7	mg/L	1	10/27/2023 10:56	213822
Magnesium	NELAP	0.0055	0.0500		23.7	mg/L	1	10/27/2023 10:56	213822
Potassium	NELAP	0.0400	0.100		4.00	mg/L	1	10/27/2023 10:56	213822
Sodium	NELAP	0.0250	0.0500		67.2	mg/L	1	10/27/2023 10:56	213822
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/27/2023 20:52	213822
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/27/2023 20:52	213822
Barium	NELAP	0.0007	0.0010		0.0429	mg/L	5	10/27/2023 20:52	213822
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/27/2023 20:52	213822
Boron	NELAP	0.0092	0.0250		5.05	mg/L	5	10/27/2023 20:52	213822
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/27/2023 20:52	213822
Chromium	NELAP	0.0008	0.0015		< 0.0015	mg/L	5	10/30/2023 13:04	213822
Cobalt	NELAP	0.0001	0.0010	J	0.0006	mg/L	5	10/27/2023 20:52	213822
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/27/2023 20:52	213822
Lithium	*	0.0015	0.0030		0.0031	mg/L	5	10/27/2023 20:52	213822
Molybdenum	*	0.0006	0.0015		< 0.0015	mg/L	5	10/27/2023 20:52	213822
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/27/2023 20:52	213822
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/27/2023 20:52	213822



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100903-006  
**Matrix:** GROUNDWATER

**Work Order:** 23100903  
**Report Date:** 20-Nov-23  
**Client Sample ID:** G07  
**Collection Date:** 10/24/2023 12:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/27/2023 11:06	213831



Client: Ramboll  
Client Project: JOP-23Q4  
Lab ID: 23100903-007  
Matrix: GROUNDWATER

Work Order: 23100903  
Report Date: 20-Nov-23

Client Sample ID: G08

Collection Date: 10/24/2023 12:53

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		33.13	ft	1	10/24/2023 12:53	R338500
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		24	NTU	1	10/24/2023 12:53	R338500
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		29	mV	1	10/24/2023 12:53	R338500
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		910	µS/cm	1	10/24/2023 12:53	R338500
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		18.2	°C	1	10/24/2023 12:53	R338500
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		3.34	mg/L	1	10/24/2023 12:53	R338500
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.95		1	10/24/2023 12:53	R338500
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0	0		147	mg/L	1	10/27/2023 12:10	R338399
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO3)	NELAP	0	0		0	mg/L	1	10/27/2023 12:10	R338399
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	40	50		660	mg/L	2.5	10/27/2023 11:10	R338465
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		389	mg/L	10	10/26/2023 11:51	R338345
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.29	mg/L	1	10/26/2023 13:32	R338332
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		17	mg/L	1	10/26/2023 11:46	R338363
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		140	mg/L	1	10/27/2023 10:57	213822
Magnesium	NELAP	0.0055	0.0500		34.2	mg/L	1	10/27/2023 10:57	213822
Potassium	NELAP	0.0400	0.100		1.98	mg/L	1	10/27/2023 10:57	213822
Sodium	NELAP	0.0250	0.0500		44.3	mg/L	1	10/27/2023 10:57	213822
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/27/2023 20:57	213822
Arsenic	NELAP	0.0004	0.0010		0.0145	mg/L	5	10/27/2023 20:57	213822
Barium	NELAP	0.0007	0.0010		0.105	mg/L	5	10/27/2023 20:57	213822
Beryllium	NELAP	0.0002	0.0010	J	0.0004	mg/L	5	10/30/2023 13:10	213822
Boron	NELAP	0.0092	0.0250		5.28	mg/L	5	10/30/2023 13:10	213822
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/27/2023 20:57	213822
Chromium	NELAP	0.0008	0.0015		0.0065	mg/L	5	10/30/2023 13:10	213822
Cobalt	NELAP	0.0001	0.0010		0.0066	mg/L	5	10/30/2023 13:10	213822
Lead	NELAP	0.0006	0.0010		0.0032	mg/L	5	10/27/2023 20:57	213822
Lithium	*	0.0015	0.0030		0.0032	mg/L	5	10/30/2023 13:10	213822
Molybdenum	*	0.0006	0.0015		0.0030	mg/L	5	10/27/2023 20:57	213822
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/27/2023 20:57	213822
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/27/2023 20:57	213822



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100903-007  
**Matrix:** GROUNDWATER

**Work Order:** 23100903  
**Report Date:** 20-Nov-23  
**Client Sample ID:** G08  
**Collection Date:** 10/24/2023 12:53

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/27/2023 11:08	213831



Client: Ramboll  
Client Project: JOP-23Q4  
Lab ID: 23100903-008  
Matrix: GROUNDWATER

Work Order: 23100903  
Report Date: 20-Nov-23

Client Sample ID: G09

Collection Date: 10/25/2023 14:34

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		41.91	ft	1	10/25/2023 14:34	R338500
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		8.1	NTU	1	10/25/2023 14:34	R338500
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		-3	mV	1	10/25/2023 14:34	R338500
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		601	µS/cm	1	10/25/2023 14:34	R338500
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		18.1	°C	1	10/25/2023 14:34	R338500
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.90	mg/L	1	10/25/2023 14:34	R338500
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.23		1	10/25/2023 14:34	R338500
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		110	mg/L	1	10/27/2023 10:52	R338399
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	10/27/2023 10:52	R338399
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		472	mg/L	1	10/30/2023 11:02	R338538
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		245	mg/L	10	10/27/2023 14:24	R338425
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.31	mg/L	1	10/26/2023 11:39	R338332
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		17	mg/L	1	10/27/2023 14:19	R338455
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		62.3	mg/L	1	10/27/2023 11:02	213822
Magnesium	NELAP	0.0055	0.0500		24.6	mg/L	1	10/27/2023 11:02	213822
Potassium	NELAP	0.0400	0.100		0.860	mg/L	1	10/27/2023 11:02	213822
Sodium	NELAP	0.0250	0.0500		57.7	mg/L	1	10/27/2023 11:02	213822
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/27/2023 21:03	213822
Arsenic	NELAP	0.0004	0.0010		0.0027	mg/L	5	10/27/2023 21:03	213822
Barium	NELAP	0.0007	0.0010		0.0312	mg/L	5	10/27/2023 21:03	213822
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/30/2023 13:15	213822
Boron	NELAP	0.0092	0.0250		3.50	mg/L	5	10/30/2023 13:15	213822
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/27/2023 21:03	213822
Chromium	NELAP	0.0008	0.0015		0.0015	mg/L	5	10/30/2023 13:15	213822
Cobalt	NELAP	0.0001	0.0010		0.0027	mg/L	5	10/30/2023 13:15	213822
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/27/2023 21:03	213822
Lithium	*	0.0015	0.0030		0.0034	mg/L	5	10/30/2023 13:15	213822
Molybdenum	*	0.0006	0.0015	J	0.0007	mg/L	5	10/27/2023 21:03	213822
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/27/2023 21:03	213822
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/27/2023 21:03	213822



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100903-008  
**Matrix:** GROUNDWATER

**Work Order:** 23100903  
**Report Date:** 20-Nov-23  
**Client Sample ID:** G09  
**Collection Date:** 10/25/2023 14:34

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/27/2023 11:10	213831



Client: Ramboll  
Client Project: JOP-23Q4  
Lab ID: 23100903-009  
Matrix: GROUNDWATER

Work Order: 23100903  
Report Date: 20-Nov-23

Client Sample ID: G10

Collection Date: 10/24/2023 12:24

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		42.30	ft	1	10/24/2023 12:24	R338500
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		46	NTU	1	10/24/2023 12:24	R338500
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		23	mV	1	10/24/2023 12:24	R338500
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		1100	µS/cm	1	10/24/2023 12:24	R338500
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		17.4	°C	1	10/24/2023 12:24	R338500
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		1.49	mg/L	1	10/24/2023 12:24	R338500
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.60		1	10/24/2023 12:24	R338500
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		222	mg/L	1	10/27/2023 12:34	R338399
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	10/27/2023 12:34	R338399
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		800	mg/L	1	10/27/2023 11:57	R338465
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		375	mg/L	10	10/26/2023 12:13	R338345
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.35	mg/L	1	10/26/2023 13:35	R338332
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		26	mg/L	1	10/26/2023 11:54	R338363
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		117	mg/L	1	10/27/2023 11:15	213822
Magnesium	NELAP	0.0055	0.0500		38.3	mg/L	1	10/27/2023 11:15	213822
Potassium	NELAP	0.200	0.500		11.3	mg/L	5	10/30/2023 12:22	213822
Sodium	NELAP	0.0250	0.0500		85.6	mg/L	1	10/27/2023 11:15	213822
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/27/2023 21:08	213822
Arsenic	NELAP	0.0004	0.0010		0.0026	mg/L	5	10/27/2023 21:08	213822
Barium	NELAP	0.0007	0.0010		0.0385	mg/L	5	10/27/2023 21:08	213822
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/27/2023 21:08	213822
Boron	NELAP	0.0092	0.0250		2.35	mg/L	5	10/27/2023 21:08	213822
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/27/2023 21:08	213822
Chromium	NELAP	0.0008	0.0015		0.0036	mg/L	5	10/30/2023 13:21	213822
Cobalt	NELAP	0.0001	0.0010		0.0022	mg/L	5	10/27/2023 21:08	213822
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/27/2023 21:08	213822
Lithium	*	0.0015	0.0030		0.0047	mg/L	5	10/27/2023 21:08	213822
Molybdenum	*	0.0006	0.0015	J	0.0013	mg/L	5	10/31/2023 13:47	213822
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/27/2023 21:08	213822
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/27/2023 21:08	213822



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100903-009  
**Matrix:** GROUNDWATER

**Work Order:** 23100903  
**Report Date:** 20-Nov-23  
**Client Sample ID:** G10  
**Collection Date:** 10/24/2023 12:24

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/27/2023 11:22	213831





Client: Ramboll  
Client Project: JOP-23Q4  
Lab ID: 23100903-010  
Matrix: GROUNDWATER

Work Order: 23100903  
Report Date: 20-Nov-23

Client Sample ID: G11

Collection Date: 10/24/2023 11:21

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		49.32	ft	1	10/24/2023 11:21	R338500
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		9.0	NTU	1	10/24/2023 11:21	R338500
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		124	mV	1	10/24/2023 11:21	R338500
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		600	µS/cm	1	10/24/2023 11:21	R338500
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		18.0	°C	1	10/24/2023 11:21	R338500
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		2.23	mg/L	1	10/24/2023 11:21	R338500
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		5.88		1	10/24/2023 11:21	R338500
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		87	mg/L	1	10/27/2023 12:38	R338399
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	10/27/2023 12:38	R338399
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		402	mg/L	1	10/27/2023 11:57	R338465
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		180	mg/L	10	10/26/2023 12:20	R338345
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.14	mg/L	1	10/26/2023 13:37	R338332
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		30	mg/L	1	10/26/2023 12:15	R338363
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		54.4	mg/L	1	10/27/2023 11:17	213822
Magnesium	NELAP	0.0055	0.0500		19.8	mg/L	1	10/27/2023 11:17	213822
Potassium	NELAP	0.0400	0.100		0.918	mg/L	1	10/27/2023 11:17	213822
Sodium	NELAP	0.0250	0.0500		43.2	mg/L	1	10/27/2023 11:17	213822
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/27/2023 21:14	213822
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/30/2023 13:26	213822
Barium	NELAP	0.0007	0.0010		0.0217	mg/L	5	10/27/2023 21:14	213822
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/27/2023 21:14	213822
Boron	NELAP	0.0092	0.0250		0.282	mg/L	5	10/27/2023 21:14	213822
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/30/2023 13:26	213822
Chromium	NELAP	0.0008	0.0015	J	0.0009	mg/L	5	10/30/2023 13:26	213822
Cobalt	NELAP	0.0001	0.0010	J	0.0002	mg/L	5	10/30/2023 13:26	213822
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/27/2023 21:14	213822
Lithium	*	0.0015	0.0030		0.0035	mg/L	5	10/27/2023 21:14	213822
Molybdenum	*	0.0006	0.0015		< 0.0015	mg/L	5	10/31/2023 13:51	213822
Selenium	NELAP	0.0006	0.0010		0.0015	mg/L	5	10/30/2023 13:26	213822
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/27/2023 21:14	213822



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100903-010  
**Matrix:** GROUNDWATER

**Work Order:** 23100903  
**Report Date:** 20-Nov-23  
**Client Sample ID:** G11  
**Collection Date:** 10/24/2023 11:21

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/27/2023 11:24	213831



Client: Ramboll  
Client Project: JOP-23Q4  
Lab ID: 23100903-029  
Matrix: GROUNDWATER

Work Order: 23100903  
Report Date: 20-Nov-23

Client Sample ID: G51D

Collection Date: 10/25/2023 8:42

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		46.09	ft	1	10/25/2023 8:42	R338500
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		4.0	NTU	1	10/25/2023 8:42	R338500
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		170	mV	1	10/25/2023 8:42	R338500
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		332	µS/cm	1	10/25/2023 8:42	R338500
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		17.1	°C	1	10/25/2023 8:42	R338500
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		1.89	mg/L	1	10/25/2023 8:42	R338500
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		5.28		1	10/25/2023 8:42	R338500
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		52	mg/L	1	10/27/2023 11:05	R338399
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	10/27/2023 11:05	R338399
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		270	mg/L	1	10/30/2023 11:03	R338538
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	31	50		120	mg/L	5	10/27/2023 15:02	R338425
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.10	mg/L	1	10/26/2023 11:56	R338332
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		4	mg/L	1	10/27/2023 14:56	R338455
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		31.5	mg/L	1	10/27/2023 17:27	213823
Magnesium	NELAP	0.0055	0.0500		13.0	mg/L	1	10/27/2023 17:27	213823
Potassium	NELAP	0.0400	0.100		0.308	mg/L	1	10/27/2023 17:27	213823
Sodium	NELAP	0.0180	0.0500		37.0	mg/L	1	10/27/2023 17:27	213823
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/28/2023 1:18	213823
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/30/2023 16:21	213823
Barium	NELAP	0.0007	0.0010		0.0433	mg/L	5	10/28/2023 1:18	213823
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/30/2023 16:21	213823
Boron	NELAP	0.0092	0.0250		0.603	mg/L	5	10/31/2023 14:56	213823
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/30/2023 16:21	213823
Chromium	NELAP	0.0008	0.0015	J	0.0010	mg/L	5	10/30/2023 16:21	213823
Cobalt	NELAP	0.0001	0.0010	J	0.0003	mg/L	5	10/30/2023 16:21	213823
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/28/2023 1:18	213823
Lithium	*	0.0015	0.0030		0.0053	mg/L	5	10/30/2023 16:21	213823
Molybdenum	*	0.0006	0.0015		0.0015	mg/L	5	10/31/2023 14:56	213823
Selenium	NELAP	0.0006	0.0010		0.0041	mg/L	5	10/30/2023 16:21	213823
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/28/2023 1:18	213823



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100903-029  
**Matrix:** GROUNDWATER

**Work Order:** 23100903  
**Report Date:** 20-Nov-23  
**Client Sample ID:** G51D  
**Collection Date:** 10/25/2023 8:42

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/27/2023 12:52	213832



Client: Ramboll  
Client Project: JOP-23Q4  
Lab ID: 23100903-030  
Matrix: GROUNDWATER

Work Order: 23100903  
Report Date: 20-Nov-23

Client Sample ID: G52D

Collection Date: 10/24/2023 10:22

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		31.05	ft	1	10/24/2023 10:22	R338500
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		1.6	NTU	1	10/24/2023 10:22	R338500
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		0	mV	1	10/24/2023 10:22	R338500
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		393	µS/cm	1	10/24/2023 10:22	R338500
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		16.6	°C	1	10/24/2023 10:22	R338500
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		1.51	mg/L	1	10/24/2023 10:22	R338500
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.33		1	10/24/2023 10:22	R338500
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		152	mg/L	1	10/27/2023 13:23	R338399
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	10/27/2023 13:23	R338399
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		296	mg/L	1	10/27/2023 11:59	R338465
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	12	20		52	mg/L	2	10/26/2023 16:12	R338345
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.29	mg/L	1	10/26/2023 14:12	R338332
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		12	mg/L	1	10/26/2023 16:01	R338363
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		47.9	mg/L	1	10/27/2023 17:29	213823
Magnesium	NELAP	0.0055	0.0500		15.0	mg/L	1	10/27/2023 17:29	213823
Potassium	NELAP	0.0400	0.100		0.808	mg/L	1	10/27/2023 17:29	213823
Sodium	NELAP	0.0180	0.0500		29.9	mg/L	1	10/27/2023 17:29	213823
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/28/2023 1:24	213823
Arsenic	NELAP	0.0004	0.0010		0.0013	mg/L	5	10/30/2023 17:06	213823
Barium	NELAP	0.0007	0.0010		0.354	mg/L	5	10/28/2023 1:24	213823
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/30/2023 17:06	213823
Boron	NELAP	0.0092	0.025	J	0.021	mg/L	5	10/31/2023 15:00	213823
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/30/2023 17:06	213823
Chromium	NELAP	0.0008	0.0015		< 0.0015	mg/L	5	10/30/2023 17:06	213823
Cobalt	NELAP	0.0001	0.0010		0.0034	mg/L	5	10/30/2023 17:06	213823
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/28/2023 1:24	213823
Lithium	*	0.0015	0.0030	J	0.0024	mg/L	5	10/30/2023 17:06	213823
Molybdenum	*	0.0006	0.0015		< 0.0015	mg/L	5	10/31/2023 15:00	213823
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/30/2023 17:06	213823
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/28/2023 1:24	213823



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100903-030  
**Matrix:** GROUNDWATER

**Work Order:** 23100903  
**Report Date:** 20-Nov-23  
**Client Sample ID:** G52D  
**Collection Date:** 10/24/2023 10:22

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/27/2023 12:54	213832



Client: Ramboll  
Client Project: JOP-23Q4  
Lab ID: 23100903-031  
Matrix: GROUNDWATER

Work Order: 23100903  
Report Date: 20-Nov-23

Client Sample ID: G53D

Collection Date: 10/25/2023 13:59

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		39.82	ft	1	10/25/2023 13:59	R338500
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		4.6	NTU	1	10/25/2023 13:59	R338500
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		49	mV	1	10/25/2023 13:59	R338500
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		412	µS/cm	1	10/25/2023 13:59	R338500
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		17.7	°C	1	10/25/2023 13:59	R338500
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.68	mg/L	1	10/25/2023 13:59	R338500
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.49		1	10/25/2023 13:59	R338500
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		170	mg/L	1	10/27/2023 11:09	R338399
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	10/27/2023 11:09	R338399
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		312	mg/L	1	10/30/2023 11:03	R338538
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	12	20		69	mg/L	2	10/27/2023 15:18	R338425
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.74	mg/L	1	10/26/2023 11:59	R338332
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		18	mg/L	1	10/27/2023 15:07	R338455
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		38.6	mg/L	1	10/27/2023 17:41	213823
Magnesium	NELAP	0.0055	0.0500		16.9	mg/L	1	10/27/2023 17:41	213823
Potassium	NELAP	0.0400	0.100		0.294	mg/L	1	10/27/2023 17:41	213823
Sodium	NELAP	0.0180	0.0500		49.9	mg/L	1	10/27/2023 17:41	213823
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/28/2023 1:29	213823
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/28/2023 1:29	213823
Barium	NELAP	0.0007	0.0010		0.107	mg/L	5	10/28/2023 1:29	213823
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/30/2023 17:12	213823
Boron	NELAP	0.0092	0.0250		0.349	mg/L	5	10/31/2023 15:05	213823
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/28/2023 1:29	213823
Chromium	NELAP	0.0008	0.0015	J	0.0011	mg/L	5	10/30/2023 17:12	213823
Cobalt	NELAP	0.0001	0.0010		0.0012	mg/L	5	10/30/2023 17:12	213823
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/28/2023 1:29	213823
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	10/30/2023 17:12	213823
Molybdenum	*	0.0006	0.0015	J	0.0006	mg/L	5	10/28/2023 1:29	213823
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/28/2023 1:29	213823
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/28/2023 1:29	213823



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100903-031  
**Matrix:** GROUNDWATER

**Work Order:** 23100903  
**Report Date:** 20-Nov-23  
**Client Sample ID:** G53D  
**Collection Date:** 10/25/2023 13:59

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/27/2023 12:57	213832





Client: Ramboll  
Client Project: JOP-23Q4  
Lab ID: 23100903-032  
Matrix: GROUNDWATER

Work Order: 23100903  
Report Date: 20-Nov-23

Client Sample ID: G54D

Collection Date: 10/25/2023 12:46

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		44.45	ft	1	10/25/2023 12:46	R338500
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		190	NTU	1	10/25/2023 12:46	R338500
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		-32	mV	1	10/25/2023 12:46	R338500
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		643	µS/cm	1	10/25/2023 12:46	R338500
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		17.2	°C	1	10/25/2023 12:46	R338500
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		0.53	mg/L	1	10/25/2023 12:46	R338500
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.56		1	10/25/2023 12:46	R338500
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		201	mg/L	1	10/27/2023 11:14	R338399
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	10/27/2023 11:14	R338399
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		502	mg/L	1	10/30/2023 11:03	R338538
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	61	100		192	mg/L	10	10/27/2023 15:50	R338425
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.31	mg/L	1	10/26/2023 12:01	R338332
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		23	mg/L	1	10/27/2023 15:44	R338455
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		87.5	mg/L	1	10/27/2023 17:43	213823
Magnesium	NELAP	0.0055	0.0500		27.6	mg/L	1	10/27/2023 17:43	213823
Potassium	NELAP	0.0400	0.100		1.59	mg/L	1	10/27/2023 17:43	213823
Sodium	NELAP	0.0180	0.0500		57.4	mg/L	1	10/27/2023 17:43	213823
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/28/2023 1:35	213823
Arsenic	NELAP	0.0004	0.0010		0.0013	mg/L	5	10/28/2023 1:35	213823
Barium	NELAP	0.0007	0.0010		0.121	mg/L	5	10/28/2023 1:35	213823
Beryllium	NELAP	0.0002	0.0010	J	0.0003	mg/L	5	10/30/2023 17:17	213823
Boron	NELAP	0.0092	0.0250		0.396	mg/L	5	10/31/2023 15:10	213823
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/28/2023 1:35	213823
Chromium	NELAP	0.0008	0.0015		0.0058	mg/L	5	10/30/2023 17:17	213823
Cobalt	NELAP	0.0001	0.0010		0.0088	mg/L	5	10/30/2023 17:17	213823
Lead	NELAP	0.0006	0.0010		0.0015	mg/L	5	10/30/2023 17:17	213823
Lithium	*	0.0015	0.0030		0.0032	mg/L	5	10/30/2023 17:17	213823
Molybdenum	*	0.0006	0.0015	J	0.0008	mg/L	5	10/28/2023 1:35	213823
Selenium	NELAP	0.0006	0.0010	J	0.0008	mg/L	5	10/28/2023 1:35	213823
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/28/2023 1:35	213823



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100903-032  
**Matrix:** GROUNDWATER

**Work Order:** 23100903  
**Report Date:** 20-Nov-23  
**Client Sample ID:** G54D  
**Collection Date:** 10/25/2023 12:46

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/27/2023 12:59	213832



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100903-034  
**Matrix:** GROUNDWATER

**Work Order:** 23100903  
**Report Date:** 20-Nov-23  
**Client Sample ID:** SG02  
**Collection Date:** 10/23/2023 0:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		<b>Well broken</b>	ft	1	10/23/2023 0:00	R338500



**Client:** Ramboll  
**Client Project:** JOP-23Q4

**Work Order:** 23100903  
**Report Date:** 20-Nov-23

**Lab ID:** 23100903-040

**Client Sample ID:** XSG01

**Matrix:** GROUNDWATER

**Collection Date:** 10/23/2023 10:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		<b>10.10</b>	ft	1	10/23/2023 10:10	R338500



**Laboratory Results**

Client: Ramboll  
Client Project: JOP-23Q4  
Lab ID: 23100903-041  
Matrix: AQUEOUS

Work Order: 23100903  
Report Date: 20-Nov-23

Client Sample ID: Field Blank

Collection Date: 10/25/2023 14:31

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0	0		1	mg/L	1	10/27/2023 11:43	R338399
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO3)	NELAP	0	0		0	mg/L	1	10/27/2023 11:43	R338399
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		< 20	mg/L	1	10/30/2023 11:49	R338538
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	6	10		< 10	mg/L	1	10/27/2023 16:19	R338425
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10	J	0.04	mg/L	1	10/26/2023 12:19	R338332
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		< 4	mg/L	1	10/27/2023 16:19	R338455
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		< 0.100	mg/L	1	10/27/2023 17:11	213827
Magnesium	NELAP	0.0055	0.0500		< 0.0500	mg/L	1	10/27/2023 17:11	213827
Potassium	NELAP	0.0400	0.100		< 0.100	mg/L	1	10/27/2023 17:11	213827
Sodium	NELAP	0.018	0.050	J	0.022	mg/L	1	10/27/2023 17:11	213827
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010	J	0.0009	mg/L	5	10/28/2023 3:00	213827
Arsenic	NELAP	0.0004	0.0010	J	0.0009	mg/L	5	10/28/2023 3:00	213827
Barium	NELAP	0.0007	0.0010		0.0040	mg/L	5	10/28/2023 3:00	213827
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/28/2023 3:00	213827
Boron	NELAP	0.0092	0.0250		< 0.0250	mg/L	5	10/31/2023 15:20	213827
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/28/2023 3:00	213827
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	10/30/2023 18:59	213827
Cobalt	NELAP	0.0001	0.0010	J	0.0009	mg/L	5	10/28/2023 3:00	213827
Lead	NELAP	0.0006	0.0010	J	0.0009	mg/L	5	10/28/2023 3:00	213827
Lithium	*	0.0015	0.0030	J	0.0015	mg/L	5	10/28/2023 3:00	213827
Molybdenum	*	0.0006	0.0015	J	0.0015	mg/L	5	10/28/2023 3:00	213827
Selenium	NELAP	0.0006	0.0010	J	0.0009	mg/L	5	10/28/2023 3:00	213827
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/28/2023 3:00	213827
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	10/27/2023 13:21	213832



Client: Ramboll  
Client Project: JOP-23Q4  
Lab ID: 23100903-042  
Matrix: GROUNDWATER

Work Order: 23100903  
Report Date: 20-Nov-23  
Client Sample ID: G52D Duplicate  
Collection Date: 10/24/2023 10:22

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>FIELD ELEVATION MEASUREMENTS</b>									
Depth to water from measuring point	*	0	0		31.05	ft	1	10/24/2023 10:22	R338500
<b>STANDARD METHODS 2130 B FIELD</b>									
Turbidity	*	1.0	1.0		1.6	NTU	1	10/24/2023 10:22	R338500
<b>STANDARD METHODS 18TH ED. 2580 B FIELD</b>									
Oxidation-Reduction Potential	*	-300	-300		0	mV	1	10/24/2023 10:22	R338500
<b>STANDARD METHODS 2510 B FIELD</b>									
Spec. Conductance, Field	*	0	0		393	µS/cm	1	10/24/2023 10:22	R338500
<b>STANDARD METHODS 2550 B FIELD</b>									
Temperature	*	0	0		16.6	°C	1	10/24/2023 10:22	R338500
<b>STANDARD METHODS 4500-O G FIELD</b>									
Oxygen, Dissolved	*	0	0		1.51	mg/L	1	10/24/2023 10:22	R338500
<b>SW-846 9040B FIELD</b>									
pH	*	0	1.00		6.33		1	10/24/2023 10:22	R338500
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>									
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0	0		156	mg/L	1	10/27/2023 13:46	R338399
<b>STANDARD METHODS 2320 B 1997, 2011</b>									
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0	0		0	mg/L	1	10/27/2023 13:46	R338399
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>									
Total Dissolved Solids	NELAP	16	20		286	mg/L	1	10/27/2023 12:07	R338465
<b>SW-846 9036 (TOTAL)</b>									
Sulfate	NELAP	12	20		52	mg/L	2	10/26/2023 16:58	R338345
<b>SW-846 9214 (TOTAL)</b>									
Fluoride	NELAP	0.04	0.10		0.28	mg/L	1	10/26/2023 13:59	R338332
<b>SW-846 9251 (TOTAL)</b>									
Chloride	NELAP	1	4		12	mg/L	1	10/26/2023 16:52	R338363
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>									
Calcium	NELAP	0.0350	0.100		41.4	mg/L	1	10/27/2023 17:12	213827
Magnesium	NELAP	0.0055	0.0500		13.4	mg/L	1	10/27/2023 17:12	213827
Potassium	NELAP	0.0400	0.100		0.649	mg/L	1	10/27/2023 17:12	213827
Sodium	NELAP	0.0180	0.0500		25.8	mg/L	1	10/27/2023 17:12	213827
<b>SW-846 3005A, 6020A, METALS BY ICMS (TOTAL)</b>									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	10/28/2023 3:11	213827
Arsenic	NELAP	0.0004	0.0010		0.0014	mg/L	5	10/28/2023 3:11	213827
Barium	NELAP	0.0007	0.0010		0.282	mg/L	5	10/28/2023 3:11	213827
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/28/2023 3:11	213827
Boron	NELAP	0.0092	0.0250		0.0290	mg/L	5	11/01/2023 9:59	213827
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	10/28/2023 3:11	213827
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	10/30/2023 19:10	213827
Cobalt	NELAP	0.0001	0.0010		0.0042	mg/L	5	10/28/2023 3:11	213827
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/28/2023 3:11	213827
Lithium	*	0.0015	0.0030	J	0.0029	mg/L	5	10/28/2023 3:11	213827
Molybdenum	*	0.0006	0.0015	J	0.0009	mg/L	5	10/28/2023 3:11	213827
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	10/28/2023 3:11	213827
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	10/28/2023 3:11	213827



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100903-042  
**Matrix:** GROUNDWATER

**Work Order:** 23100903  
**Report Date:** 20-Nov-23  
**Client Sample ID:** G52D Duplicate  
**Collection Date:** 10/24/2023 10:22

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 7470A (TOTAL)</b>									
Mercury	NELAP	0.00006	0.00020		< <b>0.00020</b>	mg/L	1	10/31/2023 9:19	213967



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### STANDARD METHODS 2510 B FIELD

Batch R338500		SampType: LCS		Units $\mu\text{S/cm}$							
SampID: LCS-R338500-1											
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	10/23/2023	

Batch R338500		SampType: LCS		Units $\mu\text{S/cm}$							
SampID: LCS-R338500-2											
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	10/24/2023	

Batch R338500		SampType: LCS		Units $\mu\text{S/cm}$							
SampID: LCS-R338500-3											
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	10/25/2023	

Batch R338500		SampType: LCS		Units $\mu\text{S/cm}$							
SampID: LCS-R338500-4											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Spec. Conductance, Field	*	0		1420	1412	0	100.2	90	110	10/23/2023	

Batch R338500		SampType: LCS		Units $\mu\text{S/cm}$							
SampID: LCS-R338500-5											
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	10/24/2023	

### SW-846 9040B FIELD

Batch R338500		SampType: LCS		Units							
SampID: LCS-R338500-1											
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	10/23/2023	

Batch R338500		SampType: LCS		Units							
SampID: LCS-R338500-2											
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	10/24/2023	





## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 9040B FIELD

Batch R338500		SampType: LCS		Units							Date Analyzed
SampID: LCS-R338500-3											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
pH	*	1.00		7.10	7.000	0	101.4	98.57	101.4	10/25/2023	

Batch R338500		SampType: LCS		Units							Date Analyzed
SampID: LCS-R338500-4											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
pH	*	1.00		7.01	7.000	0	100.1	98.57	101.4	10/23/2023	

Batch R338500		SampType: LCS		Units							Date Analyzed
SampID: LCS-R338500-5											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
pH	*	1.00		7.01	7.000	0	100.1	98.57	101.4	10/24/2023	

### STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R338395		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	10/26/2023	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/26/2023	

Batch R338395		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Total Dissolved Solids		20		964	1000	0	96.4	90	110	10/26/2023	
Total Dissolved Solids		20		976	1000	0	97.6	90	110	10/26/2023	

Batch R338395		SampType: DUP		Units mg/L		RPD Limit 10					Date Analyzed
SampID: 23100903-001ADUP											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Total Dissolved Solids		20		318				308.0	3.19	10/26/2023	

Batch R338395		SampType: DUP		Units mg/L		RPD Limit 10					Date Analyzed
SampID: 23100903-002ADUP											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Total Dissolved Solids		20		188				204.0	8.16	10/26/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R338465		SampType: MBLK		Units mg/L							Date Analyzed
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	10/27/2023	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/27/2023	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/27/2023	

Batch R338465		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Dissolved Solids		20		964	1000	0	96.4	90	110	10/27/2023	
Total Dissolved Solids		20		954	1000	0	95.4	90	110	10/27/2023	
Total Dissolved Solids		20		964	1000	0	96.4	90	110	10/27/2023	

Batch R338465		SampType: DUP		Units mg/L							RPD Limit 10	Date Analyzed
SampID: 23100903-006ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Total Dissolved Solids		20		610				618.0	1.30	10/27/2023		

Batch R338465		SampType: DUP		Units mg/L							RPD Limit 10	Date Analyzed
SampID: 23100903-042ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Total Dissolved Solids		20		290				286.0	1.39	10/27/2023		

Batch R338465		SampType: DUP		Units mg/L							RPD Limit 10	Date Analyzed
SampID: 23091794-098ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Total Dissolved Solids		200	H	13600				14040	3.33	10/27/2023		

Batch R338465		SampType: DUP		Units mg/L							RPD Limit 10	Date Analyzed
SampID: 23100902-003ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Total Dissolved Solids		20		638				624.0	2.22	10/27/2023		

Batch R338465		SampType: DUP		Units mg/L							RPD Limit 10	Date Analyzed
SampID: 23101972-006ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Total Dissolved Solids		20		314				320.0	1.89	10/27/2023		



## Quality Control Results

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

**Client:** Ramboll  
**Client Project:** JOP-23Q4

**Work Order:** 23100903  
**Report Date:** 20-Nov-23

### STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R338465		SampType: DUP		Units mg/L				RPD Limit 10		Date Analyzed
SampID: 23102042-002BDUP										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		556				584.0	4.91	10/27/2023

Batch R338538		SampType: MBLK		Units mg/L				RPD Limit 10		Date Analyzed
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	10/30/2023
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/30/2023

Batch R338538		SampType: LCS		Units mg/L				RPD Limit 10		Date Analyzed
SampID: LCS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		908	1000	0	90.8	90	110	10/30/2023
Total Dissolved Solids		20		910	1000	0	91.0	90	110	10/30/2023

Batch R338538		SampType: DUP		Units mg/L				RPD Limit 10		Date Analyzed
SampID: 23100903-031ADUP										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		326				312.0	4.39	10/30/2023

Batch R338538		SampType: DUP		Units mg/L				RPD Limit 10		Date Analyzed
SampID: 23101166-001BDUP										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		834				800.0	4.16	10/30/2023

Batch R338603		SampType: MBLK		Units mg/L				RPD Limit 10		Date Analyzed
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	10/31/2023
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/31/2023
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/31/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R338603		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Dissolved Solids		20		964	1000	0	96.4	90	110	10/31/2023	
Total Dissolved Solids		20		940	1000	0	94.0	90	110	10/31/2023	
Total Dissolved Solids		20		964	1000	0	96.4	90	110	10/31/2023	

Batch R338603		SampType: DUP		Units mg/L							RPD Limit 10	Date Analyzed
SampID: 23101164-006ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Total Dissolved Solids		20		394				396.0	0.51	10/31/2023		

Batch R338603		SampType: DUP		Units mg/L							RPD Limit 10	Date Analyzed
SampID: 23101166-005BDUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Total Dissolved Solids		20		1260				1330	5.41	10/31/2023		

Batch R338603		SampType: DUP		Units mg/L							RPD Limit 10	Date Analyzed
SampID: 23102238-012ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Total Dissolved Solids		20		940				926.0	1.50	10/31/2023		

### SW-846 9036 (TOTAL)

Batch R338345		SampType: MBLK		Units mg/L							Date Analyzed
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	10/26/2023	

Batch R338345		SampType: LCS		Units mg/L							Date Analyzed
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		20	20.00	0	99.0	90	110	10/26/2023	

Batch R338345		SampType: MS		Units mg/L							Date Analyzed
SampID: 23100903-002AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		33	20.00	14.78	92.0	85	115	10/26/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 9036 (TOTAL)

Batch R338345		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 23100903-002AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		10		34	20.00	14.78	96.8	33.18	2.88	10/26/2023	

Batch R338345		SampType: MS		Units mg/L				RPD Limit 10			
SampID: 23100903-018AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		20	E	103	40.00	64.43	97.0	85	115	10/26/2023	

Batch R338345		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 23100903-018AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		20	E	106	40.00	64.43	103.2	103.2	2.38	10/26/2023	

Batch R338345		SampType: MS		Units mg/L				RPD Limit 10			
SampID: 23100903-025AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10	E	58	20.00	40.35	89.9	85	115	10/26/2023	

Batch R338345		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 23100903-025AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		10	E	59	20.00	40.35	93.2	58.33	1.13	10/26/2023	

Batch R338345		SampType: MS		Units mg/L				RPD Limit 10			
SampID: 23100903-030AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		20		90	40.00	51.65	95.5	85	115	10/26/2023	

Batch R338345		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 23100903-030AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		20		91	40.00	51.65	97.7	89.85	0.96	10/26/2023	

Batch R338345		SampType: MS		Units mg/Kg-dry				RPD Limit 10			
SampID: 23101757-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		2090		4120	4186	0	98.4	85	115	10/26/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 9036 (TOTAL)

Batch R338345		SampType: MSD		Units mg/Kg-dry				RPD Limit 10			
SampID: 23101757-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		2090		<b>4170</b>	4186	0	99.5	4120	1.13	10/26/2023	

Batch R338345		SampType: MS		Units mg/L				RPD Limit 10			
SampID: 23101895-002AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		500		<b>1520</b>	1000	589.6	92.9	90	110	10/26/2023	

Batch R338345		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 23101895-002AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		500		<b>1530</b>	1000	589.6	94.2	1519	0.87	10/26/2023	

Batch R338425		SampType: MBLK		Units mg/L				RPD Limit 10			
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		<b>&lt; 10</b>	6.140	0	0	-100	100	10/27/2023	

Batch R338425		SampType: LCS		Units mg/L				RPD Limit 10			
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		<b>19</b>	20.00	0	95.2	90	110	10/27/2023	

Batch R338425		SampType: MS		Units mg/L				RPD Limit 10			
SampID: 23100902-002AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		100		<b>461</b>	200.0	269.7	95.4	85	115	10/27/2023	

Batch R338425		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 23100902-002AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		100		<b>467</b>	200.0	269.7	98.6	460.6	1.35	10/27/2023	

Batch R338425		SampType: MS		Units mg/L				RPD Limit 10			
SampID: 23100903-031AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		20	E	<b>109</b>	40.00	68.84	99.6	85	115	10/27/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 9036 (TOTAL)

Batch R338425		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 23100903-031AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		20	E	107	40.00	68.84	94.9	108.7	1.73	10/27/2023	

Batch R338425		SampType: MS		Units mg/L				RPD Limit 10			
SampID: 23101166-011BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		34	20.00	16.27	90.2	85	115	10/27/2023	

Batch R338425		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 23101166-011BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		10		35	20.00	16.27	93.4	34.31	1.82	10/27/2023	

Batch R338425		SampType: MS		Units mg/L				RPD Limit 10			
SampID: 23101972-004AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10	S	24	20.00	10.21	66.7	90	110	10/27/2023	

Batch R338425		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 23101972-004AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		10	S	24	20.00	10.21	67.8	23.54	1.01	10/27/2023	

Batch R338425		SampType: MS		Units mg/L				RPD Limit 10			
SampID: 23101972-009AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		37	20.00	18.34	93.8	90	110	10/27/2023	

Batch R338425		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 23101972-009AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		10		37	20.00	18.34	94.8	37.11	0.51	10/27/2023	

Batch R338425		SampType: MS		Units mg/L				RPD Limit 10			
SampID: 23102042-002BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		100		438	200.0	236.9	100.5	90	110	10/27/2023	





## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 9036 (TOTAL)

Batch R338425		SampType: MSD		Units mg/L				RPD Limit 10			Date Analyzed
SampID: 23102042-002BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		100		435	200.0	236.9	99.0	437.8	0.67	10/27/2023	

Batch R338498		SampType: MBLK		Units mg/L				RPD Limit 10			Date Analyzed
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	10/30/2023	

Batch R338498		SampType: LCS		Units mg/L				RPD Limit 10			Date Analyzed
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		20	20.00	0	98.7	90	110	10/30/2023	

Batch R338498		SampType: MS		Units mg/L				RPD Limit 10			Date Analyzed
SampID: 23101164-012AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		50		168	100.0	81.48	86.3	85	115	10/30/2023	

Batch R338498		SampType: MSD		Units mg/L				RPD Limit 10			Date Analyzed
SampID: 23101164-012AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		50		172	100.0	81.48	90.4	167.7	2.42	10/30/2023	

Batch R338498		SampType: MS		Units mg/L				RPD Limit 10			Date Analyzed
SampID: 23101166-003BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10	S	29	20.00	13.54	78.8	85	115	10/30/2023	

Batch R338498		SampType: MSD		Units mg/L				RPD Limit 10			Date Analyzed
SampID: 23101166-003BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		10		31	20.00	13.54	85.2	29.29	4.34	10/30/2023	

Batch R338498		SampType: MS		Units mg/L				RPD Limit 10			Date Analyzed
SampID: 23102238-005AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		100		427	200.0	242.5	92.3	85	115	10/30/2023	





## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 9036 (TOTAL)

Batch R338498		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 23102238-005AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		100		433	200.0	242.5	95.1	427.1	1.30	10/30/2023	

Batch R338498		SampType: MS		Units mg/L				RPD Limit 10			
SampID: 23102238-007AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		20		88	40.00	51.76	90.2	85	115	10/30/2023	

Batch R338498		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 23102238-007AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		20		88	40.00	51.76	91.0	87.86	0.32	10/30/2023	

Batch R338498		SampType: MS		Units mg/L				RPD Limit 10			
SampID: 23102270-003BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10	E	54	20.00	35.87	92.4	90	110	10/30/2023	

Batch R338498		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 23102270-003BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		10	SE	53	20.00	35.87	87.2	54.36	1.93	10/30/2023	

Batch R338641		SampType: MBLK		Units mg/L				RPD Limit 10			
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	11/01/2023	

Batch R338641		SampType: LCS		Units mg/L				RPD Limit 10			
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		20	20.00	0	99.4	90	110	11/01/2023	

Batch R338641		SampType: MS		Units mg/L				RPD Limit 10			
SampID: 23101244-017BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		50		172	100.0	84.88	87.3	85	115	11/01/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 9036 (TOTAL)

Batch R338641		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 23101244-017BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		50		174	100.0	84.88	89.3	172.2	1.18	11/01/2023	

Batch R338641		SampType: MS		Units mg/L				RPD Limit 10			
SampID: 23102241-001DMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		50	S	217	100.0	134.3	82.3	90	110	11/01/2023	

Batch R338641		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 23102241-001DMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		50	S	219	100.0	134.3	85.2	216.5	1.33	11/01/2023	

Batch R338641		SampType: MS		Units mg/L				RPD Limit 10			
SampID: 23102414-001BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		19	20.00	0	95.6	90	110	11/01/2023	

Batch R338641		SampType: MSD		Units mg/L				RPD Limit 10			
SampID: 23102414-001BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		10		19	20.00	0	95.6	19.11	0.05	11/01/2023	

### SW-846 9214 (TOTAL)

Batch R338332		SampType: MBLK		Units mg/L				RPD Limit 10			
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	10/26/2023	

Batch R338332		SampType: LCS		Units mg/L				RPD Limit 10			
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		1.05	1.000	0	105.4	90	110	10/26/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 9214 (TOTAL)

Batch R338332		SampType: MS		Units mg/L							Date
SampID: 23100903-008AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Fluoride		0.10		2.55	2.000	0.3130	112.1	75	125		10/26/2023

Batch R338332		SampType: MSD		Units mg/L		RPD Limit 15					Date
SampID: 23100903-008AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Fluoride		0.10		2.39	2.000	0.3130	103.6	2.554	6.80		10/26/2023

Batch R338332		SampType: MS		Units mg/L							Date
SampID: 23100903-025AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Fluoride		0.10		2.42	2.000	0.2710	107.2	75	125		10/26/2023

Batch R338332		SampType: MSD		Units mg/L		RPD Limit 15					Date
SampID: 23100903-025AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Fluoride		0.10		2.38	2.000	0.2710	105.2	2.415	1.63		10/26/2023

Batch R338332		SampType: MS		Units mg/L							Date
SampID: 23100903-028AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Fluoride		0.10		2.28	2.000	0.2630	100.7	75	125		10/26/2023

Batch R338332		SampType: MSD		Units mg/L		RPD Limit 15					Date
SampID: 23100903-028AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Fluoride		0.10		2.37	2.000	0.2630	105.5	2.276	4.17		10/26/2023

Batch R338332		SampType: MS		Units mg/L							Date
SampID: 23100903-039AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed
Fluoride		0.10		2.06	2.000	0.3140	87.4	75	125		10/26/2023

Batch R338332		SampType: MSD		Units mg/L		RPD Limit 15					Date
SampID: 23100903-039AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		Analyzed
Fluoride		0.10		2.12	2.000	0.3140	90.1	2.061	2.63		10/26/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 9214 (TOTAL)

Batch R338332		SampType: MS		Units mg/L							Date Analyzed
SampID: 23100903-041AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.12	2.000	0.03700	104.2	75	125	10/26/2023	

Batch R338332		SampType: MSD		Units mg/L							RPD Limit 15	Date Analyzed
SampID: 23100903-041AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Fluoride		0.10		2.07	2.000	0.03700	101.8	2.122	2.29	10/26/2023		

Batch R338332		SampType: MS		Units mg/L							Date Analyzed
SampID: 23100903-042AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.33	2.000	0.2840	102.2	75	125	10/26/2023	

Batch R338332		SampType: MSD		Units mg/L							RPD Limit 15	Date Analyzed
SampID: 23100903-042AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Fluoride		0.10		2.30	2.000	0.2840	101.0	2.328	0.99	10/26/2023		

Batch R338332		SampType: MS		Units mg/L							Date Analyzed
SampID: 23100903-043AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.16	2.000	0.2540	95.4	75	125	10/26/2023	

Batch R338332		SampType: MSD		Units mg/L							RPD Limit 15	Date Analyzed
SampID: 23100903-043AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Fluoride		0.10		2.21	2.000	0.2540	97.8	2.162	2.24	10/26/2023		

### SW-846 9251 (TOTAL)

Batch R338363		SampType: MBLK		Units mg/L							Date Analyzed
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	10/26/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 9251 (TOTAL)

Batch R338363		SampType: MBLK		Units mg/Kg							
SampID: MB-R338363											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride	*	40		< 40	0.5000	0	0	-100	100	10/26/2023	

Batch R338363		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	100.6	90	110	10/26/2023	

Batch R338363		SampType: LCS		Units mg/Kg							
SampID: LCS-R338363											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride	*	40	J	20	20.00	0	100.6	90	110	10/26/2023	

Batch R338363		SampType: MS		Units mg/L							
SampID: 23100903-002AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		40	20.00	21.82	90.0	85	115	10/26/2023	

Batch R338363		SampType: MSD		Units mg/L							
SampID: 23100903-002AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		40	20.00	21.82	90.6	39.82	0.33	10/26/2023	

Batch R338363		SampType: MS		Units mg/L							
SampID: 23100903-018AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		36	20.00	17.17	92.6	85	115	10/26/2023	

Batch R338363		SampType: MSD		Units mg/L							
SampID: 23100903-018AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		36	20.00	17.17	93.0	35.68	0.22	10/26/2023	

Batch R338363		SampType: MS		Units mg/L							
SampID: 23100903-025AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		39	20.00	20.92	91.8	85	115	10/26/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 9251 (TOTAL)

Batch R338363		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed
SampID: 23100903-025AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		39	20.00	20.92	92.8	39.29	0.46	10/26/2023	

Batch R338363		SampType: MS		Units mg/L				RPD Limit 15		Date Analyzed
SampID: 23100903-030AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		30	20.00	11.59	94.4	85	115	10/26/2023

Batch R338363		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed
SampID: 23100903-030AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		30	20.00	11.59	94.3	30.46	0.03	10/26/2023	

Batch R338363		SampType: MS		Units mg/Kg-dry				RPD Limit 15		Date Analyzed
SampID: 23101757-001AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride	*	837		4220	4186	161.4	96.9	85	115	10/26/2023

Batch R338363		SampType: MSD		Units mg/Kg-dry				RPD Limit 15			Date Analyzed
SampID: 23101757-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride	*	837		4200	4186	161.4	96.4	4220	0.51	10/26/2023	

Batch R338455		SampType: MBLK		Units mg/L				RPD Limit 15		Date Analyzed
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	10/27/2023

Batch R338455		SampType: LCS		Units mg/L				RPD Limit 15		Date Analyzed
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	10/27/2023

Batch R338455		SampType: MS		Units mg/L				RPD Limit 15		Date Analyzed
SampID: 23100902-002AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		20		123	100.0	25.81	97.6	85	115	10/27/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 9251 (TOTAL)

Batch R338455		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 23100902-002AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		20		125	100.0	25.81	98.8	123.4	0.95	10/27/2023	

Batch R338455		SampType: MS		Units mg/L				RPD Limit 15			
SampID: 23100903-031AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		36	20.00	17.56	92.6	85	115	10/27/2023	

Batch R338455		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 23100903-031AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		36	20.00	17.56	92.4	36.09	0.14	10/27/2023	

Batch R338455		SampType: MS		Units mg/L				RPD Limit 15			
SampID: 23101166-011BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4	E	51	20.00	31.94	96.4	85	115	10/27/2023	

Batch R338455		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 23101166-011BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4	E	52	20.00	31.94	98.6	51.22	0.87	10/27/2023	

Batch R338455		SampType: MS		Units mg/L				RPD Limit 15			
SampID: 23101972-004AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		34	20.00	14.15	97.1	85	115	10/27/2023	

Batch R338455		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 23101972-004AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		34	20.00	14.15	97.6	33.57	0.33	10/27/2023	

Batch R338455		SampType: MS		Units mg/L				RPD Limit 15			
SampID: 23101972-009AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4	E	51	20.00	31.56	97.8	85	115	10/27/2023	





## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 9251 (TOTAL)

Batch R338455		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 23101972-009AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4	E	51	20.00	31.56	98.6	51.11	0.35	10/27/2023	

Batch R338509		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	10/30/2023	

Batch R338509		SampType: MBLK		Units mg/L							
SampID: MBLK-179572											
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	10/30/2023	

Batch R338509		SampType: MBLK		Units mg/L							
SampID: MBLK-213850											
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	10/30/2023	

Batch R338509		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		21	20.00	0	102.9	90	110	10/30/2023	

Batch R338509		SampType: MS		Units mg/L							
SampID: 23101164-004AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		8	S	91	40.00	56.73	84.7	85	115	10/30/2023	

Batch R338509		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 23101164-004AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		8	S	88	40.00	56.73	79.1	90.62	2.51	10/30/2023	

Batch R338509		SampType: MS		Units mg/L							
SampID: 23101166-003BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		30	20.00	11.24	93.0	85	115	10/30/2023	





## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 9251 (TOTAL)

Batch R338509		SampType: MSD		Units mg/L			RPD Limit 15			
SampID: 23101166-003BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		30	20.00	11.24	93.9	29.84	0.60	10/30/2023

Batch R338509		SampType: MS		Units mg/L			RPD Limit 15			
SampID: 23102238-005AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		28	20.00	8.440	95.9	85	115	10/30/2023

Batch R338509		SampType: MSD		Units mg/L			RPD Limit 15			
SampID: 23102238-005AMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		28	20.00	8.440	96.7	27.62	0.54	10/30/2023

Batch R338509		SampType: MS		Units mg/L			RPD Limit 15			
SampID: 23102238-007AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		35	20.00	17.01	90.8	85	115	10/30/2023

Batch R338509		SampType: MSD		Units mg/L			RPD Limit 15			
SampID: 23102238-007AMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		35	20.00	17.01	91.8	35.17	0.54	10/30/2023

Batch R338509		SampType: MS		Units mg/L			RPD Limit 15			
SampID: 23102241-001DMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		8		60	40.00	16.51	109.1	85	115	10/30/2023

Batch R338509		SampType: MSD		Units mg/L			RPD Limit 15			
SampID: 23102241-001DMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		8		61	40.00	16.51	112.1	60.15	1.99	10/30/2023

Batch R338509		SampType: MS		Units mg/L			RPD Limit 15			
SampID: 23102270-003BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		40		259	200.0	67.45	95.8	85	115	10/30/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 9251 (TOTAL)

Batch R338509		SampType: MSD		Units mg/L			RPD Limit 15			
SampID: 23102270-003BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		40		262	200.0	67.45	97.2	259.0	1.13	10/30/2023

Batch R338688		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	11/01/2023

Batch R338688		SampType: MBLK		Units mg/L						
SampID: MBLK-214041										
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	11/02/2023

Batch R338688		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		21	20.00	0	103.0	90	110	11/01/2023

Batch R338688		SampType: MS		Units mg/L						
SampID: 23101164-012AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		40		275	200.0	89.69	92.5	85	115	11/01/2023

Batch R338688		SampType: MSD		Units mg/L			RPD Limit 15			
SampID: 23101164-012AMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		40		277	200.0	89.69	93.7	274.6	0.90	11/01/2023

Batch R338688		SampType: MS		Units mg/L						
SampID: 23101244-017BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		35	20.00	17.50	87.4	85	115	11/01/2023

Batch R338688		SampType: MSD		Units mg/L			RPD Limit 15			
SampID: 23101244-017BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		35	20.00	17.50	87.9	34.99	0.26	11/01/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 9251 (TOTAL)

Batch R338688		SampType: MS		Units mg/L							Date Analyzed
SampID: 23101244-036AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		<b>26</b>	20.00	7.030	96.8	85	115	11/01/2023	

Batch R338688		SampType: MSD		Units mg/L							RPD Limit 15	Date Analyzed
SampID: 23101244-036AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Chloride		4		<b>26</b>	20.00	7.030	94.3	26.38	1.91	11/01/2023		

Batch R338688		SampType: MS		Units mg/L							Date Analyzed
SampID: 23102399-002BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		<b>36</b>	20.00	18.06	88.0	85	115	11/01/2023	

Batch R338688		SampType: MSD		Units mg/L							RPD Limit 15	Date Analyzed
SampID: 23102399-002BMMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Chloride		4		<b>36</b>	20.00	18.06	87.2	35.67	0.48	11/01/2023		

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

Batch 213822		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-213822											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		< <b>0.100</b>	0.0350	0	0	-100	100	10/27/2023	
Magnesium		0.0500		< <b>0.0500</b>	0.0055	0	0	-100	100	10/27/2023	
Potassium		0.100		< <b>0.100</b>	0.0400	0	0	-100	100	10/27/2023	
Sodium		0.0500		< <b>0.0500</b>	0.0180	0	0	-100	100	10/27/2023	

Batch 213822		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-213822											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		<b>2.67</b>	2.500	0	106.8	85	115	10/27/2023	
Magnesium		0.0500		<b>2.41</b>	2.500	0	96.4	85	115	10/27/2023	
Potassium		0.100		<b>2.67</b>	2.500	0	106.7	85	115	10/27/2023	
Sodium		0.0500		<b>2.61</b>	2.500	0	104.3	85	115	10/27/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

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

Batch 213822		SampType: MS		Units mg/L							Date Analyzed
SampID: 23100903-013BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100	S	79.8	2.500	78.06	70.4	75	125	10/27/2023	
Magnesium		0.0500		23.8	2.500	21.61	87.3	75	125	10/27/2023	
Potassium		0.100		4.28	2.500	1.699	103.1	75	125	10/27/2023	
Sodium		0.0500		32.5	2.500	30.20	91.6	75	125	10/27/2023	

Batch 213822		SampType: MSD		Units mg/L							RPD Limit 20	Date Analyzed
SampID: 23100903-013BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Calcium		0.100		79.9	2.500	78.06	75.2	79.82	0.15	10/27/2023		
Magnesium		0.0500		23.8	2.500	21.61	86.7	23.80	0.07	10/27/2023		
Potassium		0.100		4.25	2.500	1.699	102.1	4.276	0.60	10/27/2023		
Sodium		0.0500		32.1	2.500	30.20	76.8	32.49	1.15	10/27/2023		

Batch 213823		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-213823											
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	10/30/2023	
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	10/30/2023	
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	10/27/2023	
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	10/27/2023	

Batch 213823		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-213823											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		2.68	2.500	0	107.1	85	115	10/30/2023	
Magnesium		0.0500		2.56	2.500	0	102.4	85	115	10/27/2023	
Potassium		0.100		2.83	2.500	0	113.1	85	115	10/27/2023	
Sodium		0.0500		2.77	2.500	0	110.8	85	115	10/27/2023	

Batch 213823		SampType: MS		Units mg/L							Date Analyzed
SampID: 23100903-021BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100	S	90.9	2.500	87.59	131.6	75	125	10/27/2023	
Magnesium		0.0500		24.8	2.500	22.13	108.9	75	125	10/27/2023	
Potassium		0.100		4.35	2.500	1.423	117.0	75	125	10/27/2023	
Sodium		0.0500		25.1	2.500	22.53	102.8	75	125	10/27/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

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

Batch 213823		SampType: MSD		Units mg/L				RPD Limit 20			
SampID: 23100903-021BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100	S	92.4	2.500	87.59	194.4	90.88	1.71	10/27/2023	
Magnesium		0.0500	S	25.3	2.500	22.13	126.0	24.85	1.70	10/27/2023	
Potassium		0.100		4.40	2.500	1.423	118.9	4.348	1.11	10/27/2023	
Sodium		0.0500		25.5	2.500	22.53	118.8	25.10	1.58	10/27/2023	

Batch 213823		SampType: MS		Units mg/L				RPD Limit 20			
SampID: 23100903-036BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100	S	145	2.500	143.2	67.2	75	125	10/27/2023	
Magnesium		0.0500		61.4	2.500	59.36	81.7	75	125	10/27/2023	
Potassium		0.100		3.80	2.500	0.8912	116.3	75	125	10/27/2023	
Sodium		0.0500		25.1	2.500	23.14	77.6	75	125	10/27/2023	

Batch 213823		SampType: MSD		Units mg/L				RPD Limit 20			
SampID: 23100903-036BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100	S	144	2.500	143.2	14.8	144.8	0.91	10/27/2023	
Magnesium		0.0500	S	61.1	2.500	59.36	68.9	61.40	0.52	10/27/2023	
Potassium		0.100		3.78	2.500	0.8912	115.5	3.798	0.50	10/27/2023	
Sodium		0.0500		25.2	2.500	23.14	81.2	25.08	0.36	10/27/2023	

Batch 213827		SampType: MBLK		Units mg/L				RPD Limit 20			
SampID: MBLK-213827											
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	10/27/2023	
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	10/27/2023	
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	10/27/2023	
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	10/27/2023	

Batch 213827		SampType: LCS		Units mg/L				RPD Limit 20			
SampID: LCS-213827											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		2.47	2.500	0	99.0	85	115	10/27/2023	
Magnesium		0.0500		2.40	2.500	0	95.9	85	115	10/27/2023	
Potassium		0.100		2.56	2.500	0	102.2	85	115	10/27/2023	
Sodium		0.0500		2.44	2.500	0	97.4	85	115	10/27/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

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

Batch 213827		SampType: MS		Units mg/L						
SampID: 23100903-042BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		<b>44.1</b>	2.500	41.41	107.2	75	125	10/27/2023
Magnesium		0.0500		<b>15.9</b>	2.500	13.38	98.6	75	125	10/27/2023
Potassium		0.100		<b>3.19</b>	2.500	0.6489	101.5	75	125	10/27/2023
Sodium		0.0500		<b>28.4</b>	2.500	25.82	102.8	75	125	10/27/2023

Batch 213827		SampType: MSD		Units mg/L							RPD Limit 20
SampID: 23100903-042BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100		<b>44.2</b>	2.500	41.41	113.2	44.09	0.34	10/27/2023	
Magnesium		0.0500		<b>16.0</b>	2.500	13.38	104.6	15.85	0.94	10/27/2023	
Potassium		0.100		<b>3.20</b>	2.500	0.6489	102.2	3.187	0.53	10/27/2023	
Sodium		0.0500		<b>28.5</b>	2.500	25.82	108.8	28.39	0.53	10/27/2023	

Batch 213827		SampType: MS		Units mg/L						
SampID: 23102022-011BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	<b>152</b>	2.500	151.8	24.4	75	125	10/27/2023

Batch 213827		SampType: MSD		Units mg/L							RPD Limit 20
SampID: 23102022-011BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100	S	<b>152</b>	2.500	151.8	14.0	152.4	0.17	10/27/2023	

Batch 214004		SampType: MBLK		Units mg/L						
SampID: MBLK-214004										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		<b>&lt; 0.100</b>	0.0350	0	0	-100	100	11/01/2023
Magnesium		0.0500		<b>&lt; 0.0500</b>	0.0055	0	0	-100	100	11/01/2023
Potassium		0.100		<b>&lt; 0.100</b>	0.0400	0	0	-100	100	11/01/2023
Sodium		0.0500		<b>&lt; 0.0500</b>	0.0180	0	0	-100	100	11/01/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

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

Batch 214004		SampType: LCS		Units mg/L						
SampID: LCS-214004										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		<b>2.56</b>	2.500	0	102.5	85	115	11/01/2023
Magnesium		0.0500		<b>2.35</b>	2.500	0	94.0	85	115	11/01/2023
Potassium		0.100		<b>2.58</b>	2.500	0	103.0	85	115	11/01/2023
Sodium		0.0500		<b>2.47</b>	2.500	0	98.7	85	115	11/01/2023

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

Batch 213822		SampType: MBLK		Units mg/L						
SampID: MBLK-213822										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	10/27/2023
Arsenic		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	10/27/2023
Arsenic		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	10/30/2023
Barium		0.0010		< <b>0.0010</b>	0.0007	0	0	-100	100	10/27/2023
Beryllium		0.0010		< <b>0.0010</b>	0.0002	0	0	-100	100	10/27/2023
Boron		0.0250		< <b>0.0250</b>	0.0093	0	0	-100	100	10/27/2023
Cadmium		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	10/27/2023
Chromium		0.0015		< <b>0.0015</b>	0.0007	0	0	-100	100	10/30/2023
Cobalt		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	10/27/2023
Lead		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	10/27/2023
Lithium	*	0.0030		< <b>0.0030</b>	0.0015	0	0	-100	100	10/27/2023
Molybdenum	*	0.0015		< <b>0.0015</b>	0.0006	0	0	-100	100	10/27/2023
Selenium		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	10/27/2023
Thallium		0.0020		< <b>0.0020</b>	0.0010	0	0	-100	100	10/27/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

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

Batch 213822 SampType: LCS Units mg/L

SampID: LCS-213822

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		<b>0.531</b>	0.5000	0	106.2	80	120	10/27/2023
Arsenic		0.0010		<b>0.520</b>	0.5000	0	104.0	80	120	10/27/2023
Arsenic		0.0010		<b>0.510</b>	0.5000	0	102.1	80	120	10/30/2023
Barium		0.0010		<b>2.11</b>	2.000	0	105.7	80	120	10/27/2023
Beryllium		0.0010		<b>0.0472</b>	0.0500	0	94.4	80	120	10/27/2023
Boron		0.0250		<b>0.469</b>	0.5000	0	93.8	80	120	10/27/2023
Cadmium		0.0010		<b>0.0515</b>	0.0500	0	102.9	80	120	10/27/2023
Chromium		0.0015		<b>0.204</b>	0.2000	0	101.8	80	120	10/30/2023
Cobalt		0.0010		<b>0.513</b>	0.5000	0	102.7	80	120	10/27/2023
Lead		0.0010		<b>0.500</b>	0.5000	0	99.9	80	120	10/27/2023
Lithium	*	0.0030		<b>0.477</b>	0.5000	0	95.4	80	120	10/27/2023
Molybdenum	*	0.0015		<b>0.486</b>	0.5000	0	97.2	80	120	10/27/2023
Selenium		0.0010		<b>0.497</b>	0.5000	0	99.4	80	120	10/27/2023
Thallium		0.0020		<b>0.234</b>	0.2500	0	93.5	80	120	10/27/2023

Batch 213822 SampType: MS Units mg/L

SampID: 23100902-002BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic		0.0010		<b>0.522</b>	0.5000	0	104.4	75	125	10/30/2023
Cobalt		0.0010		<b>0.497</b>	0.5000	0.0007581	99.3	75	125	10/27/2023
Lead		0.0010		<b>0.505</b>	0.5000	0	101.1	75	125	10/27/2023
Lithium	*	0.0030		<b>0.477</b>	0.5000	0.003701	94.7	75	125	10/27/2023

Batch 213822 SampType: MSD Units mg/L

RPD Limit 20

SampID: 23100902-002BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Arsenic		0.0010		<b>0.524</b>	0.5000	0	104.7	0.5222	0.27	10/30/2023
Cobalt		0.0010		<b>0.494</b>	0.5000	0.0007581	98.6	0.4974	0.76	10/27/2023
Lead		0.0010		<b>0.492</b>	0.5000	0	98.3	0.5054	2.77	10/27/2023
Lithium	*	0.0030		<b>0.474</b>	0.5000	0.003701	94.1	0.4770	0.63	10/27/2023





## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

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

Batch 213822		SampType: MS		Units mg/L						
SampID: 23100903-013BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		<b>0.507</b>	0.5000	0	101.4	75	125	10/30/2023
Arsenic		0.0010		<b>0.529</b>	0.5000	0	105.8	75	125	10/30/2023
Barium		0.0010		<b>2.03</b>	2.000	0.02839	100.1	75	125	10/30/2023
Beryllium		0.0010		<b>0.0512</b>	0.0500	0	102.4	75	125	10/30/2023
Boron		0.0250	S	<b>4.61</b>	0.5000	3.642	194.2	75	125	10/30/2023
Cadmium		0.0010		<b>0.0492</b>	0.0500	0	98.4	75	125	10/30/2023
Chromium		0.0015		<b>0.200</b>	0.2000	0.001134	99.2	75	125	10/30/2023
Cobalt		0.0010		<b>0.488</b>	0.5000	0	97.5	75	125	10/30/2023
Lead		0.0010		<b>0.476</b>	0.5000	0	95.2	75	125	10/27/2023
Lithium	*	0.0030		<b>0.535</b>	0.5000	0	107.1	75	125	10/30/2023
Molybdenum	*	0.0015		<b>0.486</b>	0.5000	0	97.3	75	125	10/31/2023
Selenium		0.0010		<b>0.480</b>	0.5000	0	96.1	75	125	10/30/2023
Thallium		0.0020		<b>0.237</b>	0.2500	0	94.8	75	125	10/27/2023

Batch 213822		SampType: MSD		Units mg/L		RPD Limit 20				
SampID: 23100903-013BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		<b>0.499</b>	0.5000	0	99.8	0.5072	1.59	10/30/2023
Arsenic		0.0010		<b>0.514</b>	0.5000	0	102.8	0.5288	2.86	10/30/2023
Barium		0.0010		<b>2.01</b>	2.000	0.02839	99.0	2.031	1.10	10/30/2023
Beryllium		0.0010		<b>0.0504</b>	0.0500	0	100.9	0.05118	1.44	10/30/2023
Boron		0.0250	S	<b>4.59</b>	0.5000	3.642	189.1	4.613	0.56	10/30/2023
Cadmium		0.0010		<b>0.0485</b>	0.0500	0	97.0	0.04922	1.49	10/30/2023
Chromium		0.0015		<b>0.196</b>	0.2000	0.001134	97.6	0.1996	1.59	10/30/2023
Cobalt		0.0010		<b>0.487</b>	0.5000	0	97.5	0.4876	0.06	10/30/2023
Lead		0.0010		<b>0.490</b>	0.5000	0	98.1	0.4760	2.95	10/27/2023
Lithium	*	0.0030		<b>0.536</b>	0.5000	0	107.1	0.5353	0.06	10/30/2023
Molybdenum	*	0.0015		<b>0.475</b>	0.5000	0	95.0	0.4864	2.34	10/31/2023
Selenium		0.0010		<b>0.463</b>	0.5000	0	92.6	0.4804	3.65	10/30/2023
Thallium		0.0020		<b>0.226</b>	0.2500	0	90.6	0.2370	4.56	10/27/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

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

Batch 213823 SampType: MBLK Units mg/L  
SampID: MBLK-213823

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	10/27/2023
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	10/27/2023
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	10/27/2023
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	10/27/2023
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	10/27/2023
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	10/27/2023
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	10/30/2023
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	10/27/2023
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	10/27/2023
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	10/27/2023
Molybdenum	*	0.0015		< 0.0015	0.0006	0	0	-100	100	10/27/2023
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	10/27/2023
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	10/27/2023

Batch 213823 SampType: LCS Units mg/L  
SampID: LCS-213823

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.528	0.5000	0	105.6	80	120	10/27/2023
Arsenic		0.0010		0.530	0.5000	0	106.0	80	120	10/27/2023
Barium		0.0010		2.08	2.000	0	103.8	80	120	10/27/2023
Beryllium		0.0010		0.0466	0.0500	0	93.3	80	120	10/27/2023
Boron		0.0250		0.451	0.5000	0	90.3	80	120	10/27/2023
Cadmium		0.0010		0.0506	0.0500	0	101.2	80	120	10/27/2023
Chromium		0.0015		0.197	0.2000	0	98.3	80	120	10/30/2023
Cobalt		0.0010		0.523	0.5000	0	104.5	80	120	10/27/2023
Lead		0.0010		0.484	0.5000	0	96.8	80	120	10/27/2023
Lithium	*	0.0030		0.464	0.5000	0	92.8	80	120	10/27/2023
Molybdenum	*	0.0015		0.481	0.5000	0	96.2	80	120	10/27/2023
Selenium		0.0010		0.487	0.5000	0	97.4	80	120	10/27/2023
Thallium		0.0020		0.233	0.2500	0	93.0	80	120	10/27/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

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

Batch 213823		SampType: MS		Units mg/L						
SampID: 23100903-021BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		<b>0.505</b>	0.5000	0	101.1	75	125	10/30/2023
Arsenic		0.0010		<b>0.495</b>	0.5000	0	98.9	75	125	10/30/2023
Barium		0.0010		<b>2.08</b>	2.000	0.07989	99.9	75	125	10/30/2023
Beryllium		0.0010		<b>0.0480</b>	0.0500	0	95.9	75	125	10/30/2023
Cadmium		0.0010		<b>0.0482</b>	0.0500	0	96.4	75	125	10/30/2023
Chromium		0.0015		<b>0.192</b>	0.2000	0.0009109	95.5	75	125	10/30/2023
Cobalt		0.0010		<b>0.468</b>	0.5000	0.0001988	93.5	75	125	10/30/2023
Lead		0.0010		<b>0.477</b>	0.5000	0	95.4	75	125	10/28/2023
Lithium	*	0.0030		<b>0.502</b>	0.5000	0	100.4	75	125	10/30/2023
Selenium		0.0010		<b>0.456</b>	0.5000	0	91.3	75	125	10/30/2023
Thallium		0.0020		<b>0.224</b>	0.2500	0	89.5	75	125	10/28/2023

Batch 213823		SampType: MSD		Units mg/L		RPD Limit 20				
SampID: 23100903-021BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		<b>0.518</b>	0.5000	0	103.6	0.5053	2.47	10/30/2023
Arsenic		0.0010		<b>0.514</b>	0.5000	0	102.9	0.4945	3.96	10/30/2023
Barium		0.0010		<b>2.12</b>	2.000	0.07989	102.2	2.078	2.18	10/30/2023
Beryllium		0.0010		<b>0.0486</b>	0.0500	0	97.2	0.04797	1.25	10/30/2023
Cadmium		0.0010		<b>0.0494</b>	0.0500	0	98.8	0.04822	2.43	10/30/2023
Chromium		0.0015		<b>0.198</b>	0.2000	0.0009109	98.4	0.1919	2.99	10/30/2023
Cobalt		0.0010		<b>0.481</b>	0.5000	0.0001988	96.2	0.4679	2.84	10/30/2023
Lead		0.0010		<b>0.487</b>	0.5000	0	97.5	0.4769	2.18	10/28/2023
Lithium	*	0.0030		<b>0.512</b>	0.5000	0	102.5	0.5019	2.06	10/30/2023
Selenium		0.0010		<b>0.475</b>	0.5000	0	95.0	0.4564	3.98	10/30/2023
Thallium		0.0020		<b>0.242</b>	0.2500	0	96.8	0.2238	7.86	10/28/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

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

Batch 213823		SampType: MS		Units mg/L							Date Analyzed
SampID: 23100903-036BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		<b>0.516</b>	0.5000	0	103.2	75	125	10/30/2023	
Arsenic		0.0010		<b>0.518</b>	0.5000	0.0004583	103.5	75	125	10/30/2023	
Barium		0.0010		<b>2.09</b>	2.000	0.02896	103.0	75	125	10/30/2023	
Beryllium		0.0010		<b>0.0480</b>	0.0500	0	96.1	75	125	10/30/2023	
Boron		0.0250		<b>0.611</b>	0.5000	0.1170	98.7	75	125	10/31/2023	
Cadmium		0.0010		<b>0.0486</b>	0.0500	0	97.3	75	125	10/30/2023	
Chromium		0.0015		<b>0.198</b>	0.2000	0.001139	98.2	75	125	10/30/2023	
Cobalt		0.0010		<b>0.485</b>	0.5000	0.0003618	97.0	75	125	10/30/2023	
Lead		0.0010		<b>0.489</b>	0.5000	0	97.8	75	125	10/28/2023	
Lithium	*	0.0030		<b>0.496</b>	0.5000	0.001557	98.8	75	125	10/30/2023	
Molybdenum	*	0.0015		<b>0.480</b>	0.5000	0	95.9	75	125	10/31/2023	
Selenium		0.0010		<b>0.478</b>	0.5000	0.001802	95.2	75	125	10/30/2023	
Thallium		0.0020		<b>0.236</b>	0.2500	0	94.4	75	125	10/28/2023	

Batch 213823		SampType: MSD		Units mg/L							RPD Limit 20	Date Analyzed
SampID: 23100903-036BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Antimony		0.0010		<b>0.515</b>	0.5000	0	103.0	0.5161	0.22	10/30/2023		
Arsenic		0.0010		<b>0.517</b>	0.5000	0.0004583	103.3	0.5180	0.18	10/30/2023		
Barium		0.0010		<b>2.07</b>	2.000	0.02896	101.9	2.089	1.09	10/30/2023		
Beryllium		0.0010		<b>0.0487</b>	0.0500	0	97.3	0.04805	1.25	10/30/2023		
Boron		0.0250		<b>0.607</b>	0.5000	0.1170	98.1	0.6105	0.50	10/31/2023		
Cadmium		0.0010		<b>0.0484</b>	0.0500	0	96.9	0.04864	0.42	10/30/2023		
Chromium		0.0015		<b>0.189</b>	0.2000	0.001139	94.2	0.1975	4.18	10/30/2023		
Cobalt		0.0010		<b>0.483</b>	0.5000	0.0003618	96.5	0.4854	0.55	10/30/2023		
Lead		0.0010		<b>0.467</b>	0.5000	0	93.4	0.4891	4.65	10/28/2023		
Lithium	*	0.0030		<b>0.495</b>	0.5000	0.001557	98.6	0.4956	0.17	10/30/2023		
Molybdenum	*	0.0015		<b>0.470</b>	0.5000	0	94.1	0.4797	1.96	10/31/2023		
Selenium		0.0010		<b>0.471</b>	0.5000	0.001802	93.8	0.4776	1.39	10/30/2023		
Thallium		0.0020		<b>0.238</b>	0.2500	0	95.3	0.2359	1.05	10/28/2023		



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

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

Batch 213827 SampType: MBLK Units mg/L

SampID: MBLK-213827

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	10/28/2023
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	10/28/2023
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	10/28/2023
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	10/28/2023
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	10/28/2023
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	10/28/2023
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	10/30/2023
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	10/28/2023
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	10/28/2023
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	10/28/2023
Molybdenum	*	0.0015		< 0.0015	0.0006	0	0	-100	100	10/28/2023
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	10/28/2023
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	10/28/2023

Batch 213827 SampType: LCS Units mg/L

SampID: LCS-213827

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.506	0.5000	0	101.2	80	120	10/28/2023
Arsenic		0.0010		0.504	0.5000	0	100.8	80	120	10/28/2023
Barium		0.0010		1.99	2.000	0	99.3	80	120	10/28/2023
Beryllium		0.0010		0.0450	0.0500	0	90.1	80	120	10/28/2023
Boron		0.0250		0.474	0.5000	0	94.8	80	120	10/28/2023
Cadmium		0.0010		0.0481	0.0500	0	96.2	80	120	10/28/2023
Chromium		0.0015		0.196	0.2000	0	97.8	80	120	10/30/2023
Cobalt		0.0010		0.494	0.5000	0	98.8	80	120	10/28/2023
Lead		0.0010		0.477	0.5000	0	95.4	80	120	10/28/2023
Lithium	*	0.0030		0.464	0.5000	0	92.8	80	120	10/28/2023
Molybdenum	*	0.0015		0.466	0.5000	0	93.3	80	120	10/28/2023
Selenium		0.0010		0.463	0.5000	0	92.7	80	120	10/28/2023
Thallium		0.0020		0.234	0.2500	0	93.6	80	120	10/28/2023



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

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

Batch 213827		SampType: MS		Units mg/L							Date Analyzed
SampID: 23100903-042BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		<b>0.513</b>	0.5000	0	102.7	75	125	10/28/2023	
Arsenic		0.0010		<b>0.532</b>	0.5000	0.001421	106.2	75	125	10/28/2023	
Barium		0.0010		<b>2.27</b>	2.000	0.2822	99.6	75	125	10/28/2023	
Beryllium		0.0010		<b>0.0454</b>	0.0500	0	90.7	75	125	10/28/2023	
Boron		0.0250		<b>0.597</b>	0.5000	0.02899	113.7	75	125	11/01/2023	
Cadmium		0.0010		<b>0.0487</b>	0.0500	0	97.4	75	125	10/28/2023	
Chromium		0.0015		<b>0.193</b>	0.2000	0	96.6	75	125	10/30/2023	
Cobalt		0.0010		<b>0.498</b>	0.5000	0.004186	98.8	75	125	10/28/2023	
Lead		0.0010		<b>0.490</b>	0.5000	0	98.0	75	125	10/28/2023	
Lithium	*	0.0030		<b>0.450</b>	0.5000	0.002859	89.5	75	125	10/28/2023	
Molybdenum	*	0.0015		<b>0.475</b>	0.5000	0.0009315	94.8	75	125	10/28/2023	
Selenium		0.0010		<b>0.480</b>	0.5000	0	96.0	75	125	10/28/2023	
Thallium		0.0020		<b>0.253</b>	0.2500	0	101.3	75	125	10/28/2023	

Batch 213827		SampType: MSD		Units mg/L							RPD Limit 20	Date Analyzed
SampID: 23100903-042BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Antimony		0.0010		<b>0.505</b>	0.5000	0	101.1	0.5133	1.58	10/28/2023		
Arsenic		0.0010		<b>0.512</b>	0.5000	0.001421	102.1	0.5324	3.95	10/28/2023		
Barium		0.0010		<b>2.25</b>	2.000	0.2822	98.3	2.274	1.15	10/28/2023		
Beryllium		0.0010		<b>0.0460</b>	0.0500	0	92.0	0.04535	1.45	10/28/2023		
Boron		0.0250		<b>0.586</b>	0.5000	0.02899	111.5	0.5973	1.83	11/01/2023		
Cadmium		0.0010		<b>0.0476</b>	0.0500	0	95.3	0.04872	2.26	10/28/2023		
Chromium		0.0015		<b>0.193</b>	0.2000	0	96.4	0.1932	0.20	10/30/2023		
Cobalt		0.0010		<b>0.497</b>	0.5000	0.004186	98.6	0.4979	0.17	10/28/2023		
Lead		0.0010		<b>0.487</b>	0.5000	0	97.3	0.4898	0.66	10/28/2023		
Lithium	*	0.0030		<b>0.460</b>	0.5000	0.002859	91.3	0.4505	2.01	10/28/2023		
Molybdenum	*	0.0015		<b>0.477</b>	0.5000	0.0009315	95.2	0.4749	0.43	10/28/2023		
Selenium		0.0010		<b>0.467</b>	0.5000	0	93.4	0.4802	2.82	10/28/2023		
Thallium		0.0020		<b>0.243</b>	0.2500	0	97.3	0.2531	3.95	10/28/2023		

Batch 214004		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-214004											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Boron		0.0250		<b>&lt; 0.0250</b>	0.0093	0	0	-100	100	11/02/2023	
Molybdenum	*	0.0015		<b>&lt; 0.0015</b>	0.0006	0	0	-100	100	11/01/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

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

Batch 214004		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-214004											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Boron		0.0250		<b>0.419</b>	0.5000	0	83.8	80	120	11/02/2023	
Molybdenum	*	0.0015		<b>0.488</b>	0.5000	0	97.6	80	120	11/01/2023	

Batch 214004		SampType: MS		Units mg/L							Date Analyzed
SampID: 23100902-002BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Boron		0.0250		<b>1.85</b>	0.5000	1.424	84.3	75	125	11/02/2023	

Batch 214004		SampType: MSD		Units mg/L							RPD Limit 20	Date Analyzed
SampID: 23100902-002BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Boron		0.0250		<b>1.81</b>	0.5000	1.424	77.3	1.845	1.93	11/02/2023		

Batch 214004		SampType: MS		Units mg/L							Date Analyzed
SampID: 23100903-021BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Boron		0.0250	S	<b>2.78</b>	1.000	2.158	62.2	75	125	11/02/2023	
Molybdenum	*	0.0015		<b>1.04</b>	1.000	0	103.5	75	125	11/01/2023	

Batch 214004		SampType: MSD		Units mg/L							RPD Limit 20	Date Analyzed
SampID: 23100903-021BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Boron		0.0250	S	<b>2.68</b>	1.000	2.158	52.3	2.780	3.62	11/02/2023		
Molybdenum	*	0.0015		<b>1.01</b>	1.000	0	100.9	1.035	2.57	11/01/2023		

### SW-846 7470A (TOTAL)

Batch 213831		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-213831											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>&lt; 0.00020</b>	0.0001	0	0	-100	100	10/27/2023	

Batch 213831		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-213831											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00491</b>	0.0050	0	98.2	85	115	10/27/2023	



## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 7470A (TOTAL)

Batch 213831		SampType: MS		Units mg/L							Date Analyzed
SampID: 23100903-008BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00473</b>	0.0050	0	94.6	75	125	10/27/2023	

Batch 213831		SampType: MSD		Units mg/L							RPD Limit 15	Date Analyzed
SampID: 23100903-008BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Mercury		0.00020		<b>0.00477</b>	0.0050	0	95.4	0.004730	0.86	10/27/2023		

Batch 213831		SampType: MS		Units mg/L							Date Analyzed
SampID: 23101922-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00503</b>	0.0050	0	100.7	75	125	10/27/2023	

Batch 213831		SampType: MSD		Units mg/L							RPD Limit 15	Date Analyzed
SampID: 23101922-001AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Mercury		0.00020		<b>0.00527</b>	0.0050	0	105.5	0.005033	4.68	10/27/2023		

Batch 213832		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-213832											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>&lt; 0.00020</b>	0.0001	0	0	-100	100	10/27/2023	

Batch 213832		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-213832											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00480</b>	0.0050	0	96.1	85	115	10/27/2023	

Batch 213832		SampType: MS		Units mg/L							Date Analyzed
SampID: 23100903-025BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00503</b>	0.0050	0	100.5	75	125	10/27/2023	

Batch 213832		SampType: MSD		Units mg/L							RPD Limit 15	Date Analyzed
SampID: 23100903-025BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Mercury		0.00020		<b>0.00483</b>	0.0050	0	96.6	0.005026	4.02	10/27/2023		





## Quality Control Results

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

### SW-846 7470A (TOTAL)

Batch 213832		SampType: MS		Units mg/L							Date Analyzed
SampID: 23100903-035BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00499</b>	0.0050	0	99.8	75	125	10/27/2023	

Batch 213832		SampType: MSD		Units mg/L							RPD Limit 15	Date Analyzed
SampID: 23100903-035BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Mercury		0.00020		<b>0.00515</b>	0.0050	0	103.0	0.004989	3.17	10/27/2023		

Batch 213967		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-213967											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>&lt; 0.00020</b>	0.0001	0	0	-100	100	10/31/2023	

Batch 213967		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-213967											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00518</b>	0.0050	0	103.6	85	115	10/31/2023	

Batch 213967		SampType: MS		Units mg/L							Date Analyzed
SampID: 23101966-006CMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00676</b>	0.0050	0.001414	106.9	75	125	10/31/2023	

Batch 213967		SampType: MSD		Units mg/L							RPD Limit 15	Date Analyzed
SampID: 23101966-006CMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Mercury		0.00020		<b>0.00663</b>	0.0050	0.001414	104.2	0.006760	2.00	10/31/2023		

Batch 213967		SampType: MS		Units mg/L							Date Analyzed
SampID: 23101972-004BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00532</b>	0.0050	0	106.3	75	125	10/31/2023	

Batch 213967		SampType: MSD		Units mg/L							RPD Limit 15	Date Analyzed
SampID: 23101972-004BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Mercury		0.00020		<b>0.00521</b>	0.0050	0	104.3	0.005317	1.98	10/31/2023		



## Receiving Check List

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

Client: Ramboll

Work Order: 23100903

Client Project: JOP-23Q4

Report Date: 20-Nov-23

Carrier: Justin Colp

Received By: AMD

Completed by:

*Amber Dilallo*

Reviewed by:

*Ellie Hopkins*

On:

25-Oct-23

Amber Dilallo

On:

26-Oct-23

Ellie Hopkins

Pages to follow:

Chain of custody

6

Extra pages included

0

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Temp °C <b>2.2</b>
Type of thermal preservation?	None <input type="checkbox"/>	Ice <input checked="" type="checkbox"/>	Blue Ice <input type="checkbox"/>	Dry Ice <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Reported field parameters measured:	Field <input checked="" type="checkbox"/>	Lab <input type="checkbox"/>	NA <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		

*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 <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials <input checked="" type="checkbox"/>
Water - TOX containers have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No TOX containers <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
NPDES/CWA TCN interferences checked/treated in the field?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

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

pH strip #90719. - amberdilallo - 10/25/2023 10:05:47 AM

G16S collection date and time per G16S on WO# 23100903. - AMD/ERH 10/25/23

Additional Nitric Acid (93773) was needed in G54D upon arrival at the laboratory. - amberdilallo - 10/26/2023 10:23:11 AM

pH strip #90719. - amberdilallo - 10/26/2023 10:24:11 AM

Samples collected on 10/24/23 and 10/25/23 were delivered to the laboratory on 10/25/23 at 1745 (on ice 2.0C - LTG1). AMD/ERH 10/26/23





**CHAIN-OF-CUSTODY / Analytical Request Document**

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

JOP 257-401  
23100903

**Section A**

Required Client Information:

**Section B**

Required Project Information:

**Section C**

Invoice Information:

Page: 3 of 3

Company: <b>Vistra Corp-Joppa</b>		Report To: <b>Brian Voelker</b>	Attention: <b>Jason Stuckey</b>
Address: <b>2100 Portland Road</b>		Copy To: <b>Sam Davies: samantha.davies@vistracorp.com</b>	Company Name: <b>Vistra Corp</b>
<b>Joppa, IL 62953</b>		<b>Roger Faughn - roger.faughn@vistracorp.com</b>	Address: <b>see Section A</b>
Email To: <b>Brian.Voelker@VistraCorp.com</b>		Purchase Order No.:	Quote Reference:
Phone: <b>(217) 753-8911</b>	Fax:	Project Name:	Project Manager:
Requested Due Date/TAT: <b>10 day</b>		Project Number: <b>2285</b>	Profile #:

ITEM #	Section D Required Client Information  <b>SAMPLE ID</b> (A-Z, 0-9 / . -) Sample IDs MUST BE UNIQUE	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 ↓ Y/N	Requested Analysis Filtered (Y/N)				Residual Chlorine (Y/N)	Project No./ Lab I.D.
		MATRIX	CODE			DATE	TIME			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other		JOP_257_401	JOP_845_401	JOP_SUP_000	JOP_PGMP_401		
		DRINKING WATER WATER WASTE WATER PRODUCT SOIL/SOLID OIL WIPE AIR OTHER TISSUE	DW WT WW P SL OL WP AR OT TS																					
1	G54S							0															23100903-033	
2	SG02							0															034	
3	Well 2					10-24-23	0906	2	1														035	
4	Well 3					10-24-23	0914	2	1														036	
5	XPW01							2	1														037	
6	XPW02							2	1														038	
7	XPW03							2	1														039	
8	XSG01							0															040	
9	Field Blank							2	1														041	
10	G52D Duplicate					10-24-23	1022	2	1														042	
11	G12S Duplicate					10-24-23	1125	2	1														043	
12	<del>Well 1</del>					<del>10-24-23</del>	<del>0843</del>																	
13	<del>FRM 10/25/23</del>																							
14																								
15																								
16																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS				
JOP-23Q4 Rev 1	J. Coip	10-4	1700	Justin Coip	10/4/23	1700	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:	Justin Coip						
SIGNATURE of SAMPLER:	<i>Justin Coip</i>			DATE Signed (MM/DD/YY):	10-24-23		

23100903  
JOP-237-401

**CHAIN-OF-CUSTODY / Analytical Request Document**

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

Page: 1 of 3

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	COLLECTED	DATE	TIME	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.
								Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other				
								DRINKING WATER WATER WASTE WATER PRODUCT SOIL/SOLID OIL WIPE AIR OTHER TISSUE	DW WT WW P SL CL WP AR OT TS										
1	G01D						2											23100903-001	
2	G02D						2											002	
3	G03						2											003	
4	G05			10/24/23	1403		2											004	
5	G06			10/24/23	1322		2											005	
6	G07						2											006	
7	G08						2											007	
8	G09			10/25/23	1434		2											008	
9	G10						2											009	
10	G11						2											010	
11	G12D						2											011	
12	G12S						2											012	
13	G13D						2											013	
14	G13S						2											014	
15	G151			10/25/23	941		2											015	
16	G153			10/25/23	1325		2											016	
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	SAMPLE CONDITIONS									
JOP-23Q4 Rev 1		Roger Faughn		10/25/23	1745	Omar Dikalo		10/25/23	1745	2.0	Y	N	Y						

Added HNO3 (98773) to  
G04D. pH ✓ 9.0719  
Gum 10/26/23

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER: <i>Tracy Varrel</i>		DATE Signed (MM/DD/YY): 10/25/23	
SIGNATURE of SAMPLER: <i>Tracy Varrel</i>			

LTCL



**CHAIN-OF-CUSTODY / Analytical Request Document**

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

JQP-257-401  
23100903

Page: 3 of 3

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

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    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)	Project No./ Lab I.D.				
					DATE	TIME			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other					JOP_257_401	JOP_845_401	JOP_SUP_000	JOP_PGMP_401
1	G54S						0										✓	✓	✓	✓		23100903-033		
2	SG02						0										✓	✓	✓	✓		034		
3	Well 2						2	1	1										✓	✓		035		
4	Well 3						2	1	1										✓	✓		036		
5	XPW01					10/25/23	1116	2	1	1								✓	✓	✓		037		
6	XPW02					10/25/23	1203	2	1	1								✓	✓	✓		038		
7	XPW03					10/25/23	1025	2	1	1								✓	✓	✓		039		
8	XSG01						0										✓	✓				040		
9	Field Blank					10/25/23	1431	2	1	1							✓	✓	✓	✓		041		
10	G52D Duplicate							2	1	1							✓	✓	✓	✓		042		
11	G12S Duplicate							2	1	1									✓	✓		043		
12																								
13																								
14																								
15																								
16																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	
JOP-23Q4 Rev 1	Jessy Carroll	10/25/23	1745	Imogen Dilalla	10/25/23	1745	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:	Jessy Carroll				
SIGNATURE of SAMPLER:	Jessy Carroll	DATE Signed (MM/DD/YY):	10/25/23		



December 01, 2023

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-23Q4**

**WorkOrder: 23100904**

Dear Eric Bauer:

TEKLAB, INC received 40 samples on 10/25/2023 5:45:00 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](mailto:ehurley@teklabinc.com)



## Report Contents

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

**Client:** Ramboll

**Work Order:** 23100904

**Client Project:** JOP-23Q4

**Report Date:** 01-Dec-23

**This reporting package includes the following:**

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Sample Summary	47
Receiving Check List	49
Chain of Custody	Appended



## Definitions

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

Client: Ramboll

Work Order: 23100904

Client Project: JOP-23Q4

Report Date: 01-Dec-23

### 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:** 23100904

**Client Project:** JOP-23Q4

**Report Date:** 01-Dec-23

### Qualifiers

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



## Case Narrative

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

**Client:** Ramboll  
**Client Project:** JOP-23Q4

**Work Order:** 23100904  
**Report Date:** 01-Dec-23

**Cooler Receipt Temp:** 2.0 °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  
**Client Project:** JOP-23Q4

**Work Order:** 23100904  
**Report Date:** 01-Dec-23

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2024	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		1/31/2024	Collinsville
Missouri	MDNR	00930		5/31/2023	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-001  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G01D  
**Collection Date:** 10/23/2023 12:44

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:11	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-002  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G02D  
**Collection Date:** 10/23/2023 13:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:11	R339926





**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-003  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G03  
**Collection Date:** 10/23/2023 14:24

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:12	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-004  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G05  
**Collection Date:** 10/24/2023 14:03

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:12	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-005  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G06  
**Collection Date:** 10/24/2023 13:22

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:12	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-006  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G07  
**Collection Date:** 10/24/2023 12:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:12	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-007  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G08  
**Collection Date:** 10/24/2023 12:53

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:12	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-008  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G09  
**Collection Date:** 10/25/2023 14:34

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:12	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-009  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G10  
**Collection Date:** 10/24/2023 12:24

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:12	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-010  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G11  
**Collection Date:** 10/24/2023 11:21

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:12	R339926





**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-011  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G12D  
**Collection Date:** 10/24/2023 12:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:13	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-012  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G12S  
**Collection Date:** 10/24/2023 11:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:13	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-013  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G13D  
**Collection Date:** 10/24/2023 10:52

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:13	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-014  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G13S  
**Collection Date:** 10/24/2023 10:27

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:13	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-015  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G151  
**Collection Date:** 10/25/2023 9:41

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:13	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-016  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G153  
**Collection Date:** 10/25/2023 13:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:13	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-017  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G16S  
**Collection Date:** 10/24/2023 9:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:13	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-018  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G18S  
**Collection Date:** 10/23/2023 12:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:13	R339926





**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-019  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G19D  
**Collection Date:** 10/23/2023 13:19

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:13	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-020  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G19S  
**Collection Date:** 10/23/2023 13:03

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:13	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-021  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G20D  
**Collection Date:** 10/24/2023 9:27

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 16:53	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-022  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G20S  
**Collection Date:** 10/24/2023 9:02

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 16:55	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-023  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G21D  
**Collection Date:** 10/23/2023 15:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 16:55	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-024  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G21S  
**Collection Date:** 10/23/2023 15:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 16:55	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-025  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G22D  
**Collection Date:** 10/23/2023 14:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 16:55	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-026  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G22S  
**Collection Date:** 10/23/2023 14:19

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 16:55	R339926





**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-027  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G23S  
**Collection Date:** 10/23/2023 12:34

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 16:56	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-028  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G24S  
**Collection Date:** 10/23/2023 13:54

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 16:58	R339926



**Client:** Ramboll

**Work Order:** 23100904

**Client Project:** JOP-23Q4

**Report Date:** 01-Dec-23

**Lab ID:** 23100904-029

**Client Sample ID:** G51D

**Matrix:** GROUNDWATER

**Collection Date:** 10/25/2023 8:42

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 16:58	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-030  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G52D  
**Collection Date:** 10/24/2023 10:22

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 16:58	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-031  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G53D  
**Collection Date:** 10/25/2023 13:59

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 16:58	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-032  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G54D  
**Collection Date:** 10/25/2023 12:46

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 16:58	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-033  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** Well 2  
**Collection Date:** 10/24/2023 9:06

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 16:59	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-034  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** Well 3  
**Collection Date:** 10/24/2023 9:44

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 16:59	R339926





**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-035  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** XPW01  
**Collection Date:** 10/25/2023 11:16

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 16:59	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-036  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** XPW02  
**Collection Date:** 10/25/2023 12:03

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:05	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-037  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** XPW03  
**Collection Date:** 10/25/2023 10:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:06	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-038  
**Matrix:** AQUEOUS

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** Field Blank  
**Collection Date:** 10/25/2023 14:31

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:06	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-039  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G52D Duplicate  
**Collection Date:** 10/24/2023 10:22

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:06	R339926



**Client:** Ramboll  
**Client Project:** JOP-23Q4  
**Lab ID:** 23100904-040  
**Matrix:** GROUNDWATER

**Work Order:** 23100904  
**Report Date:** 01-Dec-23  
**Client Sample ID:** G12S Duplicate  
**Collection Date:** 10/24/2023 11:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>									
Subcontracted Analysis	*	0	0		See Attached		1	11/20/2023 17:06	R339926



## Sample Summary

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

**Client:** Ramboll  
**Client Project:** JOP-23Q4

**Work Order:** 23100904  
**Report Date:** 01-Dec-23

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
23100904-001	G01D	Groundwater	1	10/23/2023 12:44
23100904-002	G02D	Groundwater	1	10/23/2023 13:35
23100904-003	G03	Groundwater	1	10/23/2023 14:24
23100904-004	G05	Groundwater	1	10/24/2023 14:03
23100904-005	G06	Groundwater	1	10/24/2023 13:22
23100904-006	G07	Groundwater	1	10/24/2023 12:40
23100904-007	G08	Groundwater	1	10/24/2023 12:53
23100904-008	G09	Groundwater	1	10/25/2023 14:34
23100904-009	G10	Groundwater	1	10/24/2023 12:24
23100904-010	G11	Groundwater	1	10/24/2023 11:21
23100904-011	G12D	Groundwater	1	10/24/2023 12:05
23100904-012	G12S	Groundwater	1	10/24/2023 11:25
23100904-013	G13D	Groundwater	1	10/24/2023 10:52
23100904-014	G13S	Groundwater	1	10/24/2023 10:27
23100904-015	G151	Groundwater	1	10/25/2023 9:41
23100904-016	G153	Groundwater	1	10/25/2023 13:25
23100904-017	G16S	Groundwater	1	10/24/2023 9:55
23100904-018	G18S	Groundwater	1	10/23/2023 12:05
23100904-019	G19D	Groundwater	1	10/23/2023 13:19
23100904-020	G19S	Groundwater	1	10/23/2023 13:03
23100904-021	G20D	Groundwater	1	10/24/2023 9:27
23100904-022	G20S	Groundwater	1	10/24/2023 9:02
23100904-023	G21D	Groundwater	1	10/23/2023 15:30
23100904-024	G21S	Groundwater	1	10/23/2023 15:08
23100904-025	G22D	Groundwater	1	10/23/2023 14:40
23100904-026	G22S	Groundwater	1	10/23/2023 14:19
23100904-027	G23S	Groundwater	1	10/23/2023 12:34
23100904-028	G24S	Groundwater	1	10/23/2023 13:54
23100904-029	G51D	Groundwater	1	10/25/2023 8:42
23100904-030	G52D	Groundwater	1	10/24/2023 10:22
23100904-031	G53D	Groundwater	1	10/25/2023 13:59
23100904-032	G54D	Groundwater	1	10/25/2023 12:46
23100904-033	Well 2	Groundwater	1	10/24/2023 9:06
23100904-034	Well 3	Groundwater	1	10/24/2023 9:44
23100904-035	XPW01	Groundwater	1	10/25/2023 11:16
23100904-036	XPW02	Groundwater	1	10/25/2023 12:03
23100904-037	XPW03	Groundwater	1	10/25/2023 10:25
23100904-038	Field Blank	Aqueous	1	10/25/2023 14:31
23100904-039	G52D Duplicate	Groundwater	1	10/24/2023 10:22



## Sample Summary

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

**Client:** Ramboll  
**Client Project:** JOP-23Q4

**Work Order:** 23100904  
**Report Date:** 01-Dec-23

---

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
23100904-040	G12S Duplicate	Groundwater	1	10/24/2023 11:25

---





## Receiving Check List

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

Client: Ramboll

Work Order: 23100904

Client Project: JOP-23Q4

Report Date: 01-Dec-23

Carrier: Tracy Carroll

Received By: AMD

Completed by:

*Amber Dilallo*

Reviewed by:

*Ellie Hopkins*

On:

26-Oct-23

Amber Dilallo

On:

26-Oct-23

Ellie Hopkins

Pages to follow:

Chain of custody

6

Extra pages included

39

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Temp °C <b>2.0</b>
Type of thermal preservation?	None <input type="checkbox"/>	Ice <input checked="" type="checkbox"/>	Blue Ice <input type="checkbox"/>	Dry Ice <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Reported field parameters measured:	Field <input type="checkbox"/>	Lab <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		

*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 <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials <input checked="" type="checkbox"/>
Water - TOX containers have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No TOX containers <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
NPDES/CWA TCN interferences checked/treated in the field?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

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

pH strip #90719. - ERH/HW/amberdilallo - 10/26/2023 10:39:24 AM

Additional Nitric Acid (93773) was needed in G16S, G13S, G18S and G153 upon arrival at the laboratory. - ERH/HW/amberdilallo - 10/26/2023 10:39:29 AM

Samples collected on 10/24/23 and 10/25/23 were delivered to the laboratory on 10/25/23 at 1745 (on ice - 2.0C - LTG1). - AMD/HW/ERH 10/26/23



**CHAIN-OF-CUSTODY / Analytical Request Document**

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

JOP-257401  
23100904

Page: 2 of 3

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	DATE	TIME	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.		
							Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	JOP_257_401	JOP_845_401		JOP_SUP_000	JOP_PGMP_401						
1	G16S		10/24/23	955		2	2															23100904-017			
2	G18S		10-23-23	1205		2	2															018			
3	G19D		10-23-23	1319		2	2															019			
4	G19S		10-23-23	1303		2	2															020			
5	G20D		10/24/23	927		2	2															021			
6	G20S		10/24/23	902		2	2															022			
7	G21D		10-23-23	1530		2	2															023			
8	G21S			1508		2	2															024			
9	G22D			1440		2	2															025			
10	G22S			1419		2	2															026			
11	G23S			1234		2	2															027			
12	G24S			1354		2	2															028			
13	G51D					2	2															029			
14	G52D		10-24-23	1022		2	2															030			
15	G53D					2	2															031			
16	G54D					2	2															032			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
JOP-23Q4 Rev 1 Re 2276/2278 only	J. Colp	10/21	1700	Smiley DeBello	10/24/23	1700	Y N

<b>SAMPLER NAME AND SIGNATURE</b>		Temp (°C)	Rec'd on (date)	Capped/Sealed/Color (Y/N)	Sam. Disrupt (Y/N)
PRINT Name of SAMPLER: <b>Justin Colp</b>	SIGNATURE of SAMPLER: <i>[Signature]</i>				
DATE Signed (MM/DD/YY): <b>10-24-23</b>					

JOP-257-401  
23100904

### CHAIN-OF-CUSTODY / Analytical Request Document

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

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	COLLECTED DATE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Requested Analysis Filtered (Y/N)				Residual Chlorine (Y/N)	Project No./ Lab I.D.	
						Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Analysis Test	JOP_257_401	JOP_845_401	JOP_SUP_000	JOP_PGMP_401				
1	G54S																					N/A
2	SG02																					N/A
3	Well 2		10-24-23	0906	2																	23100904-033
4	Well 3		10-24-23	0944	2																	034
5	XPW01				2																	035
6	XPW02				2																	036
7	XPW03				2																	037
8	XSG01				2																	N/A
9	Field Blank				2																	23100904-038
10	G52D Duplicate		10-24-23	1022	2																	039
11	G12S Duplicate		10-24-23	1125	2																	040
12	<del>Well 1</del>		<del>10-24-23</del>	<del>0843</del>																		
13	<del>Well 1</del>																					
14																						
15																						
16																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
JOP-23Q4 Rev 1 R-226/228, only	J. Colp	10/24	1700	Justin Colp	10/24	1700	Y N

SAMPLER NAME AND SIGNATURE		Temp/°C	Residual on Ice (Y/N)	Dusky Sealed/Other (Y/N)	Samp. pip/contact (Y/N)
PRINT Name of SAMPLER:	SIGNATURE of SAMPLER:				
	Justin Colp				
	[Signature]				
	DATE Signed (MM/DD/YY):				
	10-24-23				

23100904  
JOP-257-401

### CHAIN-OF-CUSTODY / Analytical Request Document

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

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

ITEM #	Section D Required Client Information  <b>SAMPLE ID</b> (A-Z, 0-9 / . -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/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								Requested Analysis Filtered (Y/N)				Residual Chlorine (Y/N)	Project No./ Lab I.D.				
					DATE	TIME			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Analysis Test ↓	Y/N	Y/N	Y/N			Y/N			
																								Y/N	Y/N	Y/N
1	G01D						2		2							✓	✓	✓	✓							23100904-001
2	G02D						2		2							✓	✓	✓	✓							002
3	G03						2		2							✓	✓	✓	✓							003
4	G05				10/24/23	1403	2		2							✓	✓	✓	✓							004
5	G06				10/24/23	1322	2		2							✓	✓	✓	✓							005
6	G07						2		2							✓	✓	✓	✓							006
7	G08						2		2							✓	✓	✓	✓							007
8	G09				10/25/23	1434	2		2							✓	✓	✓	✓							008
9	G10						2		2							✓	✓	✓	✓							009
10	G11						2		2							✓	✓	✓	✓							010
11	G12D						2		2										✓	✓						011
12	G12S						2		2										✓	✓						012
13	G13D						2		2										✓	✓						013
14	G13S						2		2										✓	✓						014
15	G151				10/25/23	9211	2		2										✓	✓						015
16	G153				10/25/23	1325	2		2										✓	✓						016

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
JOP-23Q4 Rev 1 R230/238 only	Tracy Carron	10/25/23	1745	Shou De Salls	10/25/23	1745	2.0	Y	N	Y

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 Carron	SIGNATURE OF SAMPLER: Tracy Carron				
DATE Signed (MM/DD/YY): 10/25/23					

Preserved in lab w/ AND3 (93773) to  
PHV 90719 #1W 10/26/23 G153 Bottle 2 of 2

LIC 1  
#1W 10/26/23

23100904

### CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 2 of 3

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	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 <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other		JOP_257_401	JOP_845_401	JOP_SUP_000	JOP_PGMP_401						
1	G16S				2	2																		23100904-017		
2	G18S				2	2																		018		
3	G19D				2	2																		019		
4	G19S				2	2																		020		
5	G20D				2	2																		021		
6	G20S				2	2																		022		
7	G21D				2	2																		023		
8	G21S				2	2																		024		
9	G22D				2	2																		025		
10	G22S				2	2																		026		
11	G23S				2	2																		027		
12	G24S				2	2																		028		
13	G51D		10/25/23	842	2	2																		029		
14	G52D		10/25/23	1359	2	2																		030		
15	G53D		10/25/23	1745	2	2																		031		
16	G54D		10/25/23	1746	2	2																		032		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS		
JOP-23Q4 Rev 1 to 226/228, only	Tracy Carroll	10/25/23	1745	Shirley Divalo	10/25/23	1745	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 Carroll				
SIGNATURE of SAMPLER:	[Signature]	DATE Signed (MM/DD/YY):	10/25/23		

JOP-257-401  
23100904

**CHAIN-OF-CUSTODY / Analytical Request Document**

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

Page: 3 of 3

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	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.		
						Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other											
						DATE	TIME																	
1	G54S																				N/A			
2	SG02																				N/A			
3	Well 2				2		2														23100904-033			
4	Well 3				2		2														034			
5	XPW01		10/25/23	1116	2		2														035			
6	XPW02		10/25/23	1203	2		2														036			
7	XPW03		10/25/23	1025	2		2														037			
8	XSG01																				N/A			
9	Field Blank		10/25/23	1431	2		2														23100904-038			
10	G52D Duplicate				2		2														039			
11	G12S Duplicate				2		2														040			
12																								
13																								
14																								
15																								
16																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	
JOP-23Q4 Rev 1 Part 26/278, only	Tracy Carroll	10/25/23	1745	Umae Odeh	10/25/23	1745	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 Carroll	SIGNATURE of SAMPLER: Tracy Carroll				
DATE Signed (MM/DD/YY): 10/25/23					

# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 11/30/2023 2:46:56 PM

## JOB DESCRIPTION

Radium-226 and Radium-228  
23100904

## JOB NUMBER

160-51965-1



## 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  
11/30/2023 2:46:56 PM

Authorized for release by  
Rhonda Ridenhower, Business Unit Manager  
[Rhonda.Ridenhower@et.eurofinsus.com](mailto:Rhonda.Ridenhower@et.eurofinsus.com)  
Designee for  
Jayna Awalt, Project Manager II  
[Jayna.Awalt@et.eurofinsus.com](mailto:Jayna.Awalt@et.eurofinsus.com)  
(314)298-8566



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Case Narrative . . . . .	4
Chain of Custody . . . . .	5
Receipt Checklists . . . . .	9
Definitions/Glossary . . . . .	10
Method Summary . . . . .	11
Sample Summary . . . . .	12
Client Sample Results . . . . .	13
QC Sample Results . . . . .	33
QC Association Summary . . . . .	36
Tracer Carrier Summary . . . . .	38

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

Job ID: 160-51965-1  
Job ID: 160-51965-1  
SDG: 23100904

---

**Job ID: 160-51965-1**

---

**Laboratory: Eurofins St. Louis**

**Narrative**

---

**Job Narrative  
160-51965-1**

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 or unless requested as wet weight by the client. All soil/solid sample results for other parameters are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

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.

**Receipt**

The samples were received on 10/27/2023 3:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved. The temperatures of the 4 coolers at receipt time were 16.7°C, 17.4°C, 17.4°C and 17.6°C

**Gas Flow Proportional Counter**

Method 904.0: Radium-228 batch 634473

The detection goal was not met for the following sample. Sample was prepped at a reduced volume due to the presence of matrix interferences: 23100904-032 (160-51965-32). Analytical results are reported with the detection limit achieved.

Method 904.0: Radium-228 batch 634471

The detection goal was not met for the following sample. Samples were prepped at a reduced volume due to the presence of matrix interferences: 23100904-007 (160-51965-7), 23100904-008 (160-51965-8), 23100904-009 (160-51965-9) and 23100904-015 (160-51965-15). 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.



**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

Project#: 23100904

Contact: Elizabeth Hurley Email: ehurley@teklabinc.com  
Standard TAT Billing/PO: 35179 Phone: 618.344-1004 ext. 33

Requested Due Date:

Cooler Temp:  Sampler:  QC Level:  2  1  0

Comments: **Please issue reports and invoices via email only**  
Please analyze for Radium 226/228 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.

**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
	23100904-001	10/23/23 1244	HNO3	Groundwater
	23100904-002	10/23/23 1335	HNO3	Groundwater
	23100904-003	10/23/23 1424	HNO3	Groundwater
	23100904-004	10/24/23 1403	HNO3	Groundwater
	23100904-005	10/24/23 1322	HNO3	Groundwater
	23100904-006	10/24/23 1240	HNO3	Groundwater
	23100904-007	10/24/23 1253	HNO3	Groundwater
	23100904-008	10/25/23 1434	HNO3	Groundwater
	23100904-009	10/24/23 1224	HNO3	Groundwater
	23100904-010	10/24/23 1121	HNO3	Groundwater
	23100904-011	10/24/23 1205	HNO3	Groundwater



160-51965 Chain of Custody

\*Relinquished By: *Smawicki* Date/Time: 10/24/23

Received By: *Sara Wedington* Date/Time: 10/24/23 1530

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)



**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  
 Project#: 23100904  
 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.

Contact: Elizabeth Hurley Email: ehurley@teklabinc.com  
 Requested Due Date: Standard TAT Billing/PO: 35179  
 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
	23100904-012	10/24/23 1125	HNO3	Groundwater
	23100904-013	10/24/23 1052	HNO3	Groundwater
	23100904-014	10/24/23 1027	HNO3	Groundwater
	23100904-015	10/25/23 0941	HNO3	Groundwater
	23100904-016	10/25/23 1325	HNO3	Groundwater
	23100904-017	10/24/23 0955	HNO3	Groundwater
	23100904-018	10/23/23 1205	HNO3	Groundwater
	23100904-019	10/23/23 1319	HNO3	Groundwater
	23100904-020	10/23/23 1303	HNO3	Groundwater
	23100904-021	10/24/23 0927	HNO3	Groundwater
	23100904-022	10/24/23 0902	HNO3	Groundwater

\*Relinquished By: Spencer O'Connell Date/Time: 10/24/23  
 Received By: Sina Weddington Date/Time: 10/26/23 1530

SubCocRevA  
3/22/2016

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)



**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

Project#: 23100904

Contact: Elizabeth Hurley Email: ehurley@teklabinc.com  
Standard TAT Billing/PO: 35179

Requested Due Date: \_\_\_\_\_ Phone: 618 344-1004 ext. 33

Cooler Temp: \_\_\_\_\_ Sampler: \_\_\_\_\_ QC Level:  2

Comments: **Please issue reports and invoices via email only**  
Please analyze for Radium 226/228 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.

**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																
	23100904-023	10/23/23 1530	HNO3	Groundwater	<input checked="" type="checkbox"/>															
	23100904-024	10/23/23 1508	HNO3	Groundwater	<input checked="" type="checkbox"/>															
	23100904-025	10/23/23 1440	HNO3	Groundwater	<input checked="" type="checkbox"/>															
	23100904-026	10/23/23 1419	HNO3	Groundwater	<input checked="" type="checkbox"/>															
	23100904-027	10/23/23 1234	HNO3	Groundwater	<input checked="" type="checkbox"/>															
	23100904-028	10/23/23 1354	HNO3	Groundwater	<input checked="" type="checkbox"/>															
	23100904-029	10/25/23 0842	HNO3	Groundwater	<input checked="" type="checkbox"/>															
	23100904-030	10/24/23 1022	HNO3	Groundwater	<input checked="" type="checkbox"/>															
	23100904-031	10/25/23 1359	HNO3	Groundwater	<input checked="" type="checkbox"/>															
	23100904-032	10/25/23 12.46	HNO3	Groundwater	<input checked="" type="checkbox"/>															
	23100904-033	10/24/23 0906	HNO3	Groundwater	<input checked="" type="checkbox"/>															

\*Relinquished By: *Shawanda* Received By: *Sara Worthington* Date/Time: 10/26/23 1530

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)





**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

Project#: 23100904

Contact: Elizabeth Hurley Email: ehurley@teklabinc.com  
Standard TAT Billing/PO: 35179 Phone: 618 344-1004 ext. 33

Cooler Temp:  Sampler:  QC Level:  *7*

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.

**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
	23100904-034	10/24/23 0944	HNO3	Groundwater
	23100904-035	10/24/23 0906	HNO3	Groundwater
	23100904-036	10/24/23 0944	HNO3	Groundwater
	23100904-037	10/25/23 1025	HNO3	Groundwater
	23100904-038	10/25/23 1431	HNO3	Groundwater
	23100904-039	10/24/23 1022	HNO3	Groundwater
	23100904-040	10/24/23 1125	HNO3	Groundwater
			HNO3	Groundwater
			HNO3	Groundwater
			HNO3	Groundwater
			HNO3	Groundwater

Ra226/228

\*Relinquished By: *Sara O'Connell* Date/Time: *10/24/23*

Received By: *Sara Wethington* Date/Time: *10/26/23 1530*

SubCocRev/A  
3/2/2016

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)



## Login Sample Receipt Checklist

Client: TekLab, Inc

Job Number: 160-51965-1

SDG Number: 23100904

**Login Number: 51965**

**List Number: 1**

**Creator: Worthington, Sierra M**

**List Source: Eurofins St. Louis**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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 <math><6\text{mm}</math> (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: 160-51965-1  
 Job 257-46  
 SDG: 23100904

## 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

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: 160-51965-1  
 SDG: 23100904

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-51965-1	23100904-001	Water	10/23/23 12:44	10/27/23 15:30
160-51965-2	23100904-002	Water	10/23/23 13:35	10/27/23 15:30
160-51965-3	23100904-003	Water	10/23/23 14:24	10/27/23 15:30
160-51965-4	23100904-004	Water	10/24/23 14:03	10/27/23 15:30
160-51965-5	23100904-005	Water	10/24/23 13:22	10/27/23 15:30
160-51965-6	23100904-006	Water	10/24/23 12:40	10/27/23 15:30
160-51965-7	23100904-007	Water	10/24/23 12:53	10/27/23 15:30
160-51965-8	23100904-008	Water	10/25/23 14:34	10/27/23 15:30
160-51965-9	23100904-009	Water	10/24/23 12:24	10/27/23 15:30
160-51965-10	23100904-010	Water	10/24/23 11:21	10/27/23 15:30
160-51965-11	23100904-011	Water	10/24/23 12:05	10/27/23 15:30
160-51965-12	23100904-012	Water	10/24/23 11:25	10/27/23 15:30
160-51965-13	23100904-013	Water	10/24/23 10:52	10/27/23 15:30
160-51965-14	23100904-014	Water	10/24/23 10:27	10/27/23 15:30
160-51965-15	23100904-015	Water	10/25/23 09:41	10/27/23 15:30
160-51965-16	23100904-016	Water	10/25/23 13:25	10/27/23 15:30
160-51965-17	23100904-017	Water	10/24/23 09:55	10/27/23 15:30
160-51965-18	23100904-018	Water	10/23/23 12:05	10/27/23 15:30
160-51965-19	23100904-019	Water	10/23/23 13:19	10/27/23 15:30
160-51965-20	23100904-020	Water	10/23/23 13:03	10/27/23 15:30
160-51965-21	23100904-021	Water	10/24/23 09:27	10/27/23 15:30
160-51965-22	23100904-022	Water	10/24/23 09:02	10/27/23 15:30
160-51965-23	23100904-023	Water	10/23/23 15:30	10/27/23 15:30
160-51965-24	23100904-024	Water	10/23/23 15:08	10/27/23 15:30
160-51965-25	23100904-025	Water	10/23/23 14:40	10/27/23 15:30
160-51965-26	23100904-026	Water	10/23/23 14:19	10/27/23 15:30
160-51965-27	23100904-027	Water	10/23/23 12:34	10/27/23 15:30
160-51965-28	23100904-028	Water	10/23/23 13:54	10/27/23 15:30
160-51965-29	23100904-029	Water	10/25/23 08:42	10/27/23 15:30
160-51965-30	23100904-030	Water	10/24/23 10:22	10/27/23 15:30
160-51965-31	23100904-031	Water	10/25/23 13:59	10/27/23 15:30
160-51965-32	23100904-032	Water	10/25/23 12:46	10/27/23 15:30
160-51965-33	23100904-033	Water	10/24/23 09:06	10/27/23 15:30
160-51965-34	23100904-034	Water	10/24/23 09:44	10/27/23 15:30
160-51965-35	23100904-035	Water	10/25/23 11:16	10/27/23 15:30
160-51965-36	23100904-036	Water	10/25/23 12:03	10/27/23 15:30
160-51965-37	23100904-037	Water	10/25/23 10:25	10/27/23 15:30
160-51965-38	23100904-038	Water	10/25/23 14:31	10/27/23 15:30
160-51965-39	23100904-039	Water	10/24/23 10:22	10/27/23 15:30
160-51965-40	23100904-040	Water	10/24/23 11:25	10/27/23 15:30



# 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: 160-51965-1  
 Job No: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-001**

**Lab Sample ID: 160-51965-1**

Date Collected: 10/23/23 12:44

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.215		0.120	0.122	1.00	0.156	pCi/L	10/31/23 07:34	11/29/23 14:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		30 - 110					10/31/23 07:34	11/29/23 14:28	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	0.879	U	0.627	0.633	1.00	0.957	pCi/L	10/31/23 07:36	11/20/23 17:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		30 - 110					10/31/23 07:36	11/20/23 17:11	1
Y Carrier	78.1		30 - 110					10/31/23 07:36	11/20/23 17:11	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	1.09		0.638	0.645	5.00	0.957	pCi/L		11/30/23 10:52	1

**Client Sample ID: 23100904-002**

**Lab Sample ID: 160-51965-2**

Date Collected: 10/23/23 13:35

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.257		0.103	0.106	1.00	0.114	pCi/L	10/31/23 07:34	11/29/23 14:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		30 - 110					10/31/23 07:34	11/29/23 14:28	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	0.769		0.434	0.440	1.00	0.625	pCi/L	10/31/23 07:36	11/20/23 17:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		30 - 110					10/31/23 07:36	11/20/23 17:11	1
Y Carrier	78.9		30 - 110					10/31/23 07:36	11/20/23 17:11	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	1.03		0.446	0.453	5.00	0.625	pCi/L		11/30/23 10:52	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: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-003**

**Lab Sample ID: 160-51965-3**

Date Collected: 10/23/23 14:24

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.0893	U	0.106	0.107	1.00	0.174	pCi/L	10/31/23 07:34	11/29/23 14:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.6		30 - 110					10/31/23 07:34	11/29/23 14:29	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	1.14		0.687	0.695	1.00	0.996	pCi/L	10/31/23 07:36	11/20/23 17:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.6		30 - 110					10/31/23 07:36	11/20/23 17:12	1
Y Carrier	77.4		30 - 110					10/31/23 07:36	11/20/23 17:12	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	1.23		0.695	0.703	5.00	0.996	pCi/L		11/30/23 10:52	1

**Client Sample ID: 23100904-004**

**Lab Sample ID: 160-51965-4**

Date Collected: 10/24/23 14:03

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.314		0.109	0.112	1.00	0.111	pCi/L	10/31/23 07:34	11/29/23 14:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.2		30 - 110					10/31/23 07:34	11/29/23 14:29	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	0.505	U	0.356	0.359	1.00	0.534	pCi/L	10/31/23 07:36	11/20/23 17:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.2		30 - 110					10/31/23 07:36	11/20/23 17:12	1
Y Carrier	81.9		30 - 110					10/31/23 07:36	11/20/23 17:12	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	0.820		0.372	0.376	5.00	0.534	pCi/L		11/30/23 10:52	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: 160-51965-1  
 Job No: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-005**

**Lab Sample ID: 160-51965-5**

Date Collected: 10/24/23 13:22

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.128	U	0.0981	0.0988	1.00	0.140	pCi/L	10/31/23 07:34	11/29/23 14:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.9		30 - 110					10/31/23 07:34	11/29/23 14:29	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	1.16		0.607	0.617	1.00	0.838	pCi/L	10/31/23 07:36	11/20/23 17:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.9		30 - 110					10/31/23 07:36	11/20/23 17:12	1
Y Carrier	78.5		30 - 110					10/31/23 07:36	11/20/23 17:12	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	1.29		0.615	0.625	5.00	0.838	pCi/L		11/30/23 10:52	1

**Client Sample ID: 23100904-006**

**Lab Sample ID: 160-51965-6**

Date Collected: 10/24/23 12:40

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.138		0.0918	0.0926	1.00	0.132	pCi/L	10/31/23 07:34	11/29/23 19:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.7		30 - 110					10/31/23 07:34	11/29/23 19:07	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	0.598	U	0.453	0.457	1.00	0.702	pCi/L	10/31/23 07:36	11/20/23 17:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.7		30 - 110					10/31/23 07:36	11/20/23 17:12	1
Y Carrier	77.4		30 - 110					10/31/23 07:36	11/20/23 17:12	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	0.737		0.462	0.466	5.00	0.702	pCi/L		11/30/23 10:52	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: 160-51965-1  
 Job No: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-007**

**Lab Sample ID: 160-51965-7**

Date Collected: 10/24/23 12:53

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.593		0.342	0.346	1.00	0.450	pCi/L	10/31/23 07:34	11/29/23 19:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	40.3		30 - 110					10/31/23 07:34	11/29/23 19:08	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	5.02	G	2.06	2.11	1.00	2.64	pCi/L	10/31/23 07:36	11/20/23 17:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	40.3		30 - 110					10/31/23 07:36	11/20/23 17:12	1
Y Carrier	82.6		30 - 110					10/31/23 07:36	11/20/23 17:12	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	5.61		2.09	2.14	5.00	2.64	pCi/L		11/30/23 10:52	1

**Client Sample ID: 23100904-008**

**Lab Sample ID: 160-51965-8**

Date Collected: 10/25/23 14:34

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.0205	U	0.0811	0.0811	1.00	0.157	pCi/L	10/31/23 07:34	11/29/23 19:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.1		30 - 110					10/31/23 07:34	11/29/23 19:08	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	0.914	U G	0.699	0.704	1.00	1.09	pCi/L	10/31/23 07:36	11/20/23 17:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.1		30 - 110					10/31/23 07:36	11/20/23 17:12	1
Y Carrier	83.4		30 - 110					10/31/23 07:36	11/20/23 17:12	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	0.934	U	0.704	0.709	5.00	1.09	pCi/L		11/30/23 10:52	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: 160-51965-1  
 Job No: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-009**

**Lab Sample ID: 160-51965-9**

Date Collected: 10/24/23 12:24

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.191	U	0.139	0.140	1.00	0.201	pCi/L	10/31/23 07:34	11/29/23 19:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	69.8		30 - 110					10/31/23 07:34	11/29/23 19:08	1

**Method: EPA 904.0 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>1.31</b>	<b>G</b>	0.716	0.726	1.00	1.01	pCi/L	10/31/23 07:36	11/20/23 17:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	69.8		30 - 110					10/31/23 07:36	11/20/23 17:12	1
Y Carrier	81.1		30 - 110					10/31/23 07:36	11/20/23 17:12	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
<b>Radium 226 and 228</b>	<b>1.50</b>		0.729	0.739	5.00	1.01	pCi/L		11/30/23 10:52	1

**Client Sample ID: 23100904-010**

**Lab Sample ID: 160-51965-10**

Date Collected: 10/24/23 11:21

Matrix: Water

Date Received: 10/27/23 15:30

**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	-0.00444	U	0.0441	0.0441	1.00	0.0971	pCi/L	10/31/23 07:34	11/29/23 19:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.9		30 - 110					10/31/23 07:34	11/29/23 19:12	1

**Method: EPA 904.0 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>1.51</b>		0.572	0.589	1.00	0.761	pCi/L	10/31/23 07:36	11/20/23 17:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.9		30 - 110					10/31/23 07:36	11/20/23 17:12	1
Y Carrier	82.2		30 - 110					10/31/23 07:36	11/20/23 17:12	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
<b>Radium 226 and 228</b>	<b>1.51</b>		0.574	0.591	5.00	0.761	pCi/L		11/30/23 10:52	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: 160-51965-1  
 Job No: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-011**

**Lab Sample ID: 160-51965-11**

Date Collected: 10/24/23 12:05

Matrix: Water

Date Received: 10/27/23 15:30

**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	-0.00729	U	0.0461	0.0461	1.00	0.101	pCi/L	10/31/23 07:34	11/29/23 19:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.7		30 - 110					10/31/23 07:34	11/29/23 19:15	1

**Method: EPA 904.0 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.657</b>		0.415	0.419	1.00	0.615	pCi/L	10/31/23 07:36	11/20/23 17:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.7		30 - 110					10/31/23 07:36	11/20/23 17:13	1
Y Carrier	83.4		30 - 110					10/31/23 07:36	11/20/23 17:13	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
<b>Radium 226 and 228</b>	<b>0.657</b>		0.418	0.422	5.00	0.615	pCi/L		11/30/23 10:52	1

**Client Sample ID: 23100904-012**

**Lab Sample ID: 160-51965-12**

Date Collected: 10/24/23 11:25

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.0892	U	0.0732	0.0736	1.00	0.107	pCi/L	10/31/23 07:34	11/29/23 19:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.4		30 - 110					10/31/23 07:34	11/29/23 19:15	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	0.512	U	0.391	0.394	1.00	0.601	pCi/L	10/31/23 07:36	11/20/23 17:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.4		30 - 110					10/31/23 07:36	11/20/23 17:13	1
Y Carrier	86.0		30 - 110					10/31/23 07:36	11/20/23 17:13	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
<b>Radium 226 and 228</b>	<b>0.601</b>		0.398	0.401	5.00	0.601	pCi/L		11/30/23 10:52	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: 160-51965-1  
 Job No: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-013**

**Lab Sample ID: 160-51965-13**

Date Collected: 10/24/23 10:52

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.0697	0.0699	1.00	0.110	pCi/L	10/31/23 07:34	11/29/23 19:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.4		30 - 110					10/31/23 07:34	11/29/23 19:15	1

**Method: EPA 904.0 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.679</b>		0.440	0.445	1.00	0.652	pCi/L	10/31/23 07:36	11/20/23 17:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.4		30 - 110					10/31/23 07:36	11/20/23 17:13	1
Y Carrier	81.9		30 - 110					10/31/23 07:36	11/20/23 17:13	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
<b>Radium 226 and 228</b>	<b>0.746</b>		0.445	0.450	5.00	0.652	pCi/L		11/30/23 10:52	1

**Client Sample ID: 23100904-014**

**Lab Sample ID: 160-51965-14**

Date Collected: 10/24/23 10:27

Matrix: Water

Date Received: 10/27/23 15:30

**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	-0.0318	U	0.0453	0.0454	1.00	0.115	pCi/L	10/31/23 07:34	11/29/23 19:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		30 - 110					10/31/23 07:34	11/29/23 19:15	1

**Method: EPA 904.0 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.572</b>		0.385	0.388	1.00	0.572	pCi/L	10/31/23 07:36	11/20/23 17:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		30 - 110					10/31/23 07:36	11/20/23 17:13	1
Y Carrier	88.2		30 - 110					10/31/23 07:36	11/20/23 17:13	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
<b>Radium 226 and 228</b>	<b>0.572</b>		0.388	0.391	5.00	0.572	pCi/L		11/30/23 10:52	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: 160-51965-1  
 Job No: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-015**

**Lab Sample ID: 160-51965-15**

Date Collected: 10/25/23 09:41

Matrix: Water

Date Received: 10/27/23 15:30

**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	3.53		0.570	0.652	1.00	0.298	pCi/L	10/31/23 07:34	11/29/23 19:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	56.7		30 - 110					10/31/23 07:34	11/29/23 19:17	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	5.44	G	1.66	1.73	1.00	1.94	pCi/L	10/31/23 07:36	11/20/23 17:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	56.7		30 - 110					10/31/23 07:36	11/20/23 17:13	1
Y Carrier	83.4		30 - 110					10/31/23 07:36	11/20/23 17:13	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	8.97		1.76	1.85	5.00	1.94	pCi/L		11/30/23 10:52	1

**Client Sample ID: 23100904-016**

**Lab Sample ID: 160-51965-16**

Date Collected: 10/25/23 13:25

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.358		0.117	0.122	1.00	0.0961	pCi/L	10/31/23 07:34	11/29/23 19:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.4		30 - 110					10/31/23 07:34	11/29/23 19:17	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	0.361	U	0.394	0.395	1.00	0.640	pCi/L	10/31/23 07:36	11/20/23 17:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.4		30 - 110					10/31/23 07:36	11/20/23 17:13	1
Y Carrier	79.3		30 - 110					10/31/23 07:36	11/20/23 17:13	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	0.719		0.411	0.413	5.00	0.640	pCi/L		11/30/23 10:52	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: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-017**

**Lab Sample ID: 160-51965-17**

Date Collected: 10/24/23 09:55

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.0992		0.0694	0.0700	1.00	0.0925	pCi/L	10/31/23 07:34	11/29/23 19:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.9		30 - 110					10/31/23 07:34	11/29/23 19:17	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	0.155	U	0.339	0.339	1.00	0.590	pCi/L	10/31/23 07:36	11/20/23 17:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.9		30 - 110					10/31/23 07:36	11/20/23 17:13	1
Y Carrier	92.0		30 - 110					10/31/23 07:36	11/20/23 17:13	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	0.255	U	0.346	0.346	5.00	0.590	pCi/L		11/30/23 10:52	1

**Client Sample ID: 23100904-018**

**Lab Sample ID: 160-51965-18**

Date Collected: 10/23/23 12:05

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.112	U	0.0995	0.100	1.00	0.150	pCi/L	10/31/23 07:34	11/29/23 19:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.6		30 - 110					10/31/23 07:34	11/29/23 19:17	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	0.769	U	0.543	0.548	1.00	0.825	pCi/L	10/31/23 07:36	11/20/23 17:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.6		30 - 110					10/31/23 07:36	11/20/23 17:13	1
Y Carrier	89.3		30 - 110					10/31/23 07:36	11/20/23 17:13	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	0.881		0.552	0.557	5.00	0.825	pCi/L		11/30/23 10:52	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: 160-51965-1  
 Job No: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-019**

**Lab Sample ID: 160-51965-19**

Date Collected: 10/23/23 13:19

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.213		0.102	0.103	1.00	0.122	pCi/L	10/31/23 07:34	11/29/23 19:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.6		30 - 110					10/31/23 07:34	11/29/23 19:17	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	0.407	U	0.326	0.329	1.00	0.495	pCi/L	10/31/23 07:36	11/20/23 17:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.6		30 - 110					10/31/23 07:36	11/20/23 17:13	1
Y Carrier	82.6		30 - 110					10/31/23 07:36	11/20/23 17:13	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	0.620		0.342	0.345	5.00	0.495	pCi/L		11/30/23 10:52	1

**Client Sample ID: 23100904-020**

**Lab Sample ID: 160-51965-20**

Date Collected: 10/23/23 13:03

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.0794	U	0.0660	0.0664	1.00	0.0964	pCi/L	10/31/23 07:34	11/29/23 19:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.5		30 - 110					10/31/23 07:34	11/29/23 19:17	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	0.418	U	0.334	0.337	1.00	0.515	pCi/L	10/31/23 07:36	11/20/23 17:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.5		30 - 110					10/31/23 07:36	11/20/23 17:13	1
Y Carrier	88.6		30 - 110					10/31/23 07:36	11/20/23 17:13	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	0.497	U	0.340	0.343	5.00	0.515	pCi/L		11/30/23 10:52	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: 160-51965-1  
 Job No: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-021**

**Lab Sample ID: 160-51965-21**

Date Collected: 10/24/23 09:27

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.261		0.105	0.107	1.00	0.110	pCi/L	10/31/23 07:37	11/29/23 14:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.9		30 - 110					10/31/23 07:37	11/29/23 14:18	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	0.796		0.460	0.466	1.00	0.659	pCi/L	10/31/23 07:38	11/20/23 16:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.9		30 - 110					10/31/23 07:38	11/20/23 16:53	1
Y Carrier	77.4		30 - 110					10/31/23 07:38	11/20/23 16:53	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	1.06		0.472	0.478	5.00	0.659	pCi/L		11/30/23 13:28	1

**Client Sample ID: 23100904-022**

**Lab Sample ID: 160-51965-22**

Date Collected: 10/24/23 09:02

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.129		0.0785	0.0794	1.00	0.102	pCi/L	10/31/23 07:37	11/29/23 14:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		30 - 110					10/31/23 07:37	11/29/23 14:18	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	0.366	U	0.387	0.389	1.00	0.629	pCi/L	10/31/23 07:38	11/20/23 16:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		30 - 110					10/31/23 07:38	11/20/23 16:55	1
Y Carrier	77.4		30 - 110					10/31/23 07:38	11/20/23 16:55	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	0.495	U	0.395	0.397	5.00	0.629	pCi/L		11/30/23 13:28	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: 160-51965-1  
 Job No: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-023**

**Lab Sample ID: 160-51965-23**

Date Collected: 10/23/23 15:30

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.105	U	0.0809	0.0814	1.00	0.117	pCi/L	10/31/23 07:37	11/29/23 14:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.4		30 - 110					10/31/23 07:37	11/29/23 14:18	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	0.383	U	0.479	0.480	1.00	0.794	pCi/L	10/31/23 07:38	11/20/23 16:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.4		30 - 110					10/31/23 07:38	11/20/23 16:55	1
Y Carrier	77.0		30 - 110					10/31/23 07:38	11/20/23 16:55	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	0.488	U	0.486	0.487	5.00	0.794	pCi/L		11/30/23 13:28	1

**Client Sample ID: 23100904-024**

**Lab Sample ID: 160-51965-24**

Date Collected: 10/23/23 15:08

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.0456	U	0.0563	0.0564	1.00	0.0922	pCi/L	10/31/23 07:37	11/29/23 14:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.9		30 - 110					10/31/23 07:37	11/29/23 14:20	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	-0.129	U	0.366	0.366	1.00	0.700	pCi/L	10/31/23 07:38	11/20/23 16:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.9		30 - 110					10/31/23 07:38	11/20/23 16:55	1
Y Carrier	86.0		30 - 110					10/31/23 07:38	11/20/23 16:55	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	0.0456	U	0.370	0.370	5.00	0.700	pCi/L		11/30/23 13:28	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: 160-51965-1  
 Job Date: 10/25/23  
 SDG: 23100904

**Client Sample ID: 23100904-025**

**Lab Sample ID: 160-51965-25**

Date Collected: 10/23/23 14:40

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.236		0.0964	0.0987	1.00	0.0952	pCi/L	10/31/23 07:37	11/29/23 14:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.6		30 - 110					10/31/23 07:37	11/29/23 14:20	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	0.455	U	0.409	0.411	1.00	0.644	pCi/L	10/31/23 07:38	11/20/23 16:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.6		30 - 110					10/31/23 07:38	11/20/23 16:55	1
Y Carrier	75.5		30 - 110					10/31/23 07:38	11/20/23 16:55	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	0.691		0.420	0.423	5.00	0.644	pCi/L		11/30/23 13:28	1

**Client Sample ID: 23100904-026**

**Lab Sample ID: 160-51965-26**

Date Collected: 10/23/23 14:19

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.317		0.111	0.114	1.00	0.107	pCi/L	10/31/23 07:37	11/29/23 14:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.4		30 - 110					10/31/23 07:37	11/29/23 14:20	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	0.294	U	0.353	0.354	1.00	0.582	pCi/L	10/31/23 07:38	11/20/23 16:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.4		30 - 110					10/31/23 07:38	11/20/23 16:55	1
Y Carrier	81.9		30 - 110					10/31/23 07:38	11/20/23 16:55	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	0.610		0.370	0.372	5.00	0.582	pCi/L		11/30/23 13:28	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: 160-51965-1  
 Job No: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-027**

**Lab Sample ID: 160-51965-27**

Date Collected: 10/23/23 12:34

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.123		0.0810	0.0818	1.00	0.112	pCi/L	10/31/23 07:37	11/29/23 14:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.0		30 - 110					10/31/23 07:37	11/29/23 14:20	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	0.442	U	0.362	0.364	1.00	0.560	pCi/L	10/31/23 07:38	11/20/23 16:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.0		30 - 110					10/31/23 07:38	11/20/23 16:56	1
Y Carrier	76.6		30 - 110					10/31/23 07:38	11/20/23 16:56	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	0.565		0.371	0.373	5.00	0.560	pCi/L		11/30/23 13:28	1

**Client Sample ID: 23100904-028**

**Lab Sample ID: 160-51965-28**

Date Collected: 10/23/23 13:54

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.0732	U	0.0708	0.0711	1.00	0.109	pCi/L	10/31/23 07:37	11/29/23 14:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		30 - 110					10/31/23 07:37	11/29/23 14:20	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	0.134	U	0.383	0.383	1.00	0.680	pCi/L	10/31/23 07:38	11/20/23 16:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		30 - 110					10/31/23 07:38	11/20/23 16:58	1
Y Carrier	78.5		30 - 110					10/31/23 07:38	11/20/23 16:58	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	0.207	U	0.389	0.390	5.00	0.680	pCi/L		11/30/23 13:28	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: 160-51965-1  
 Job No: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-029**

**Lab Sample ID: 160-51965-29**

Date Collected: 10/25/23 08:42

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.0681	U	0.0756	0.0758	1.00	0.122	pCi/L	10/31/23 07:37	11/29/23 14:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.9		30 - 110					10/31/23 07:37	11/29/23 14:28	1

**Method: EPA 904.0 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.752</b>		0.420	0.426	1.00	0.594	pCi/L	10/31/23 07:38	11/20/23 16:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.9		30 - 110					10/31/23 07:38	11/20/23 16:58	1
Y Carrier	77.8		30 - 110					10/31/23 07:38	11/20/23 16:58	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
<b>Radium 226 and 228</b>	<b>0.820</b>		0.427	0.433	5.00	0.594	pCi/L		11/30/23 13:28	1

**Client Sample ID: 23100904-030**

**Lab Sample ID: 160-51965-30**

Date Collected: 10/24/23 10:22

Matrix: Water

Date Received: 10/27/23 15:30

**Method: EPA 903.0 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.453</b>		0.142	0.148	1.00	0.137	pCi/L	10/31/23 07:37	11/29/23 14:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.6		30 - 110					10/31/23 07:37	11/29/23 14:28	1

**Method: EPA 904.0 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.930</b>		0.536	0.543	1.00	0.767	pCi/L	10/31/23 07:38	11/20/23 16:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.6		30 - 110					10/31/23 07:38	11/20/23 16:58	1
Y Carrier	72.1		30 - 110					10/31/23 07:38	11/20/23 16:58	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
<b>Radium 226 and 228</b>	<b>1.38</b>		0.554	0.563	5.00	0.767	pCi/L		11/30/23 13:28	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: 160-51965-1  
 Job No: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-031**

**Lab Sample ID: 160-51965-31**

Date Collected: 10/25/23 13:59

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.141		0.0946	0.0954	1.00	0.134	pCi/L	10/31/23 07:37	11/29/23 14:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		30 - 110					10/31/23 07:37	11/29/23 14:28	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	0.0597	U	0.329	0.329	1.00	0.601	pCi/L	10/31/23 07:38	11/20/23 16:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		30 - 110					10/31/23 07:38	11/20/23 16:58	1
Y Carrier	80.4		30 - 110					10/31/23 07:38	11/20/23 16:58	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	0.201	U	0.342	0.343	5.00	0.601	pCi/L		11/30/23 13:28	1

**Client Sample ID: 23100904-032**

**Lab Sample ID: 160-51965-32**

Date Collected: 10/25/23 12:46

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.398		0.225	0.228	1.00	0.301	pCi/L	10/31/23 07:37	11/29/23 14:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	47.6		30 - 110					10/31/23 07:37	11/29/23 14:28	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	0.782	U G	0.864	0.867	1.00	1.41	pCi/L	10/31/23 07:38	11/20/23 16:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	47.6		30 - 110					10/31/23 07:38	11/20/23 16:58	1
Y Carrier	80.4		30 - 110					10/31/23 07:38	11/20/23 16:58	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	U	0.893	0.896	5.00	1.41	pCi/L		11/30/23 13:28	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: 160-51965-1  
 Job No: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-033**

**Lab Sample ID: 160-51965-33**

Date Collected: 10/24/23 09:06

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.0471	U	0.0732	0.0733	1.00	0.126	pCi/L	10/31/23 07:37	11/29/23 14:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.9		30 - 110					10/31/23 07:37	11/29/23 14:28	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	0.211	U	0.338	0.339	1.00	0.579	pCi/L	10/31/23 07:38	11/20/23 16:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.9		30 - 110					10/31/23 07:38	11/20/23 16:59	1
Y Carrier	78.1		30 - 110					10/31/23 07:38	11/20/23 16:59	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	0.258	U	0.346	0.347	5.00	0.579	pCi/L		11/30/23 13:28	1

**Client Sample ID: 23100904-034**

**Lab Sample ID: 160-51965-34**

Date Collected: 10/24/23 09:44

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.0122	U	0.0769	0.0769	1.00	0.152	pCi/L	10/31/23 07:37	11/29/23 14:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		30 - 110					10/31/23 07:37	11/29/23 14:30	1

**Method: EPA 904.0 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>1.07</b>		0.528	0.537	1.00	0.704	pCi/L	10/31/23 07:38	11/20/23 16:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		30 - 110					10/31/23 07:38	11/20/23 16:59	1
Y Carrier	79.3		30 - 110					10/31/23 07:38	11/20/23 16:59	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
<b>Radium 226 and 228</b>	<b>1.08</b>		0.534	0.542	5.00	0.704	pCi/L		11/30/23 13:28	1

# 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: 160-51965-1  
 Job No: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-035**

**Lab Sample ID: 160-51965-35**

Date Collected: 10/25/23 11:16

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.151	U	0.117	0.118	1.00	0.170	pCi/L	10/31/23 07:37	11/29/23 14:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.1		30 - 110					10/31/23 07:37	11/29/23 14:30	1

**Method: EPA 904.0 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>1.16</b>		0.626	0.635	1.00	0.867	pCi/L	10/31/23 07:38	11/20/23 16:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.1		30 - 110					10/31/23 07:38	11/20/23 16:59	1
Y Carrier	75.1		30 - 110					10/31/23 07:38	11/20/23 16:59	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
<b>Radium 226 and 228</b>	<b>1.31</b>		0.637	0.646	5.00	0.867	pCi/L		11/30/23 13:28	1

**Client Sample ID: 23100904-036**

**Lab Sample ID: 160-51965-36**

Date Collected: 10/25/23 12:03

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.0902	U	0.0724	0.0728	1.00	0.106	pCi/L	10/31/23 07:37	11/29/23 14:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.5		30 - 110					10/31/23 07:37	11/29/23 14:30	1

**Method: EPA 904.0 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>1.12</b>		0.450	0.462	1.00	0.576	pCi/L	10/31/23 07:38	11/20/23 17:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.5		30 - 110					10/31/23 07:38	11/20/23 17:05	1
Y Carrier	77.4		30 - 110					10/31/23 07:38	11/20/23 17:05	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
<b>Radium 226 and 228</b>	<b>1.21</b>		0.456	0.468	5.00	0.576	pCi/L		11/30/23 13:28	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: 160-51965-1  
 Job No: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-037**

**Lab Sample ID: 160-51965-37**

Date Collected: 10/25/23 10:25

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.0602	U	0.0709	0.0711	1.00	0.115	pCi/L	10/31/23 07:37	11/29/23 14:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		30 - 110					10/31/23 07:37	11/29/23 14:30	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	0.363	U	0.386	0.387	1.00	0.625	pCi/L	10/31/23 07:38	11/20/23 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		30 - 110					10/31/23 07:38	11/20/23 17:06	1
Y Carrier	79.6		30 - 110					10/31/23 07:38	11/20/23 17:06	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	0.423	U	0.392	0.393	5.00	0.625	pCi/L		11/30/23 13:28	1

**Client Sample ID: 23100904-038**

**Lab Sample ID: 160-51965-38**

Date Collected: 10/25/23 14:31

Matrix: Water

Date Received: 10/27/23 15:30

**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	-0.00856	U	0.0582	0.0582	1.00	0.121	pCi/L	10/31/23 07:37	11/29/23 14:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.2		30 - 110					10/31/23 07:37	11/29/23 14:30	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	-0.211	U	0.319	0.319	1.00	0.638	pCi/L	10/31/23 07:38	11/20/23 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.2		30 - 110					10/31/23 07:38	11/20/23 17:06	1
Y Carrier	83.4		30 - 110					10/31/23 07:38	11/20/23 17:06	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	0.000	U	0.324	0.324	5.00	0.638	pCi/L		11/30/23 13:28	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: 160-51965-1  
 SDG: 23100904

**Client Sample ID: 23100904-039**

**Lab Sample ID: 160-51965-39**

Date Collected: 10/24/23 10:22

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.430		0.139	0.144	1.00	0.151	pCi/L	10/31/23 07:37	11/29/23 14:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		30 - 110					10/31/23 07:37	11/29/23 14:29	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	1.65		0.541	0.562	1.00	0.654	pCi/L	10/31/23 07:38	11/20/23 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		30 - 110					10/31/23 07:38	11/20/23 17:06	1
Y Carrier	79.6		30 - 110					10/31/23 07:38	11/20/23 17:06	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	2.08		0.559	0.580	5.00	0.654	pCi/L		11/30/23 13:28	1

**Client Sample ID: 23100904-040**

**Lab Sample ID: 160-51965-40**

Date Collected: 10/24/23 11:25

Matrix: Water

Date Received: 10/27/23 15:30

**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	0.0900	0.0901	1.00	0.154	pCi/L	10/31/23 07:37	11/29/23 14:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		30 - 110					10/31/23 07:37	11/29/23 14:29	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	0.624		0.413	0.417	1.00	0.618	pCi/L	10/31/23 07:38	11/20/23 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		30 - 110					10/31/23 07:38	11/20/23 17:06	1
Y Carrier	84.5		30 - 110					10/31/23 07:38	11/20/23 17:06	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	0.683		0.423	0.427	5.00	0.618	pCi/L		11/30/23 13:28	1

Eurofins St. Louis



# QC Sample Results

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

Job ID: 160-51965-1  
SDG: 23100904

## Method: 903.0 - Radium-226 (GFPC)

**Lab Sample ID: MB 160-634469/1-A**  
**Matrix: Water**  
**Analysis Batch: 638759**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 634469**

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.09741	U	0.0414	0.0424	1.00	0.130	pCi/L	10/31/23 07:34	11/29/23 14:28	1
Carrier	MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	MB Qualifier	30 - 110					10/31/23 07:34	11/29/23 14:28	1
	96.2									

**Lab Sample ID: LCS 160-634469/2-A**  
**Matrix: Water**  
**Analysis Batch: 638759**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 634469**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits		
				Uncert. (2σ+/-)							
Radium-226	11.3	10.83		1.12	1.00	0.125	pCi/L	96	75 - 125		
Carrier	LCS	LCS									
Ba Carrier	%Yield	LCS Qualifier	Limits								
	93.5		30 - 110								

**Lab Sample ID: 160-51965-1 DU**  
**Matrix: Water**  
**Analysis Batch: 638759**

**Client Sample ID: 23100904-001**  
**Prep Type: Total/NA**  
**Prep Batch: 634469**

Analyte	Sample	Sample	DU	DU	Total	RL	MDC	Unit	RER	RER	
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					Limit	
Radium-226	0.215		0.1457	U	0.107	1.00	0.151	pCi/L	0.30	1	
Carrier	DU	DU									
Ba Carrier	%Yield	DU Qualifier	Limits								
	88.9		30 - 110								

**Lab Sample ID: MB 160-634472/1-A**  
**Matrix: Water**  
**Analysis Batch: 638593**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 634472**

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.04666	U	0.0481	0.0482	1.00	0.122	pCi/L	10/31/23 07:37	11/29/23 14:15	1
Carrier	MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	MB Qualifier	30 - 110					10/31/23 07:37	11/29/23 14:15	1
	90.2									

**Lab Sample ID: LCS 160-634472/2-A**  
**Matrix: Water**  
**Analysis Batch: 638593**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 634472**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	11.04		1.14	1.00	0.0929	pCi/L	97	75 - 125



# QC Sample Results

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

Job ID: 160-51965-1  
SDG: 23100904

## Method: 903.0 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-634472/2-A  
Matrix: Water  
Analysis Batch: 638593

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 634472

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	93.7		30 - 110

Lab Sample ID: 160-51965-21 DU  
Matrix: Water  
Analysis Batch: 638593

Client Sample ID: 23100904-021  
Prep Type: Total/NA  
Prep Batch: 634472

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.261		0.1928		0.0979	1.00	0.115	pCi/L	0.33	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	81.1		30 - 110

## Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-634471/1-A  
Matrix: Water  
Analysis Batch: 637571

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 634471

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3137	U	0.350	0.351	1.00	0.572	pCi/L	10/31/23 07:36	11/20/23 17:10	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		30 - 110	10/31/23 07:36	11/20/23 17:10	1
Y Carrier	81.5		30 - 110	10/31/23 07:36	11/20/23 17:10	1

Lab Sample ID: LCS 160-634471/2-A  
Matrix: Water  
Analysis Batch: 637571

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 634471

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	7.70	8.586		1.24	1.00	0.580	pCi/L	111	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	93.5		30 - 110
Y Carrier	81.5		30 - 110

Lab Sample ID: 160-51965-1 DU  
Matrix: Water  
Analysis Batch: 637571

Client Sample ID: 23100904-001  
Prep Type: Total/NA  
Prep Batch: 634471

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.879	U	0.5801	U	0.531	1.00	0.838	pCi/L	0.26	1

# QC Sample Results

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

Job ID: 160-51965-1  
 Job ID: 160-51965-1  
 SDG: 23100904

## Method: 904.0 - Radium-228 (GFPC) (Continued)

**Lab Sample ID: 160-51965-1 DU**  
**Matrix: Water**  
**Analysis Batch: 637571**

**Client Sample ID: 23100904-001**  
**Prep Type: Total/NA**  
**Prep Batch: 634471**

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	88.9		30 - 110
Y Carrier	80.4		30 - 110

**Lab Sample ID: MB 160-634473/1-A**  
**Matrix: Water**  
**Analysis Batch: 637570**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 634473**

Analyte	MB MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.5678	U	0.434	0.437	1.00	0.673	pCi/L	10/31/23 07:38	11/20/23 16:53	1

	MB	MB		Prepared	Analyzed	Dil Fac
Carrier	%Yield	Qualifier	Limits			
Ba Carrier	90.2		30 - 110	10/31/23 07:38	11/20/23 16:53	1
Y Carrier	82.2		30 - 110	10/31/23 07:38	11/20/23 16:53	1

**Lab Sample ID: LCS 160-634473/2-A**  
**Matrix: Water**  
**Analysis Batch: 637570**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 634473**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	93.7		30 - 110
Y Carrier	83.7		30 - 110

**Lab Sample ID: 160-51965-21 DU**  
**Matrix: Water**  
**Analysis Batch: 637570**

**Client Sample ID: 23100904-021**  
**Prep Type: Total/NA**  
**Prep Batch: 634473**

Analyte	Sample Sample		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
	Result	Qual								
Radium-228	0.796		1.142		0.486	1.00	0.595	pCi/L	0.36	1

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	81.1		30 - 110
Y Carrier	79.3		30 - 110

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

# QC Association Summary

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

Job ID: 160-51965-1  
SDG: 23100904

## Rad

### Prep Batch: 634469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-51965-1	23100904-001	Total/NA	Water	PrecSep-21	
160-51965-2	23100904-002	Total/NA	Water	PrecSep-21	
160-51965-3	23100904-003	Total/NA	Water	PrecSep-21	
160-51965-4	23100904-004	Total/NA	Water	PrecSep-21	
160-51965-5	23100904-005	Total/NA	Water	PrecSep-21	
160-51965-6	23100904-006	Total/NA	Water	PrecSep-21	
160-51965-7	23100904-007	Total/NA	Water	PrecSep-21	
160-51965-8	23100904-008	Total/NA	Water	PrecSep-21	
160-51965-9	23100904-009	Total/NA	Water	PrecSep-21	
160-51965-10	23100904-010	Total/NA	Water	PrecSep-21	
160-51965-11	23100904-011	Total/NA	Water	PrecSep-21	
160-51965-12	23100904-012	Total/NA	Water	PrecSep-21	
160-51965-13	23100904-013	Total/NA	Water	PrecSep-21	
160-51965-14	23100904-014	Total/NA	Water	PrecSep-21	
160-51965-15	23100904-015	Total/NA	Water	PrecSep-21	
160-51965-16	23100904-016	Total/NA	Water	PrecSep-21	
160-51965-17	23100904-017	Total/NA	Water	PrecSep-21	
160-51965-18	23100904-018	Total/NA	Water	PrecSep-21	
160-51965-19	23100904-019	Total/NA	Water	PrecSep-21	
160-51965-20	23100904-020	Total/NA	Water	PrecSep-21	
MB 160-634469/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-634469/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
160-51965-1 DU	23100904-001	Total/NA	Water	PrecSep-21	

### Prep Batch: 634471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-51965-1	23100904-001	Total/NA	Water	PrecSep_0	
160-51965-2	23100904-002	Total/NA	Water	PrecSep_0	
160-51965-3	23100904-003	Total/NA	Water	PrecSep_0	
160-51965-4	23100904-004	Total/NA	Water	PrecSep_0	
160-51965-5	23100904-005	Total/NA	Water	PrecSep_0	
160-51965-6	23100904-006	Total/NA	Water	PrecSep_0	
160-51965-7	23100904-007	Total/NA	Water	PrecSep_0	
160-51965-8	23100904-008	Total/NA	Water	PrecSep_0	
160-51965-9	23100904-009	Total/NA	Water	PrecSep_0	
160-51965-10	23100904-010	Total/NA	Water	PrecSep_0	
160-51965-11	23100904-011	Total/NA	Water	PrecSep_0	
160-51965-12	23100904-012	Total/NA	Water	PrecSep_0	
160-51965-13	23100904-013	Total/NA	Water	PrecSep_0	
160-51965-14	23100904-014	Total/NA	Water	PrecSep_0	
160-51965-15	23100904-015	Total/NA	Water	PrecSep_0	
160-51965-16	23100904-016	Total/NA	Water	PrecSep_0	
160-51965-17	23100904-017	Total/NA	Water	PrecSep_0	
160-51965-18	23100904-018	Total/NA	Water	PrecSep_0	
160-51965-19	23100904-019	Total/NA	Water	PrecSep_0	
160-51965-20	23100904-020	Total/NA	Water	PrecSep_0	
MB 160-634471/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-634471/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
160-51965-1 DU	23100904-001	Total/NA	Water	PrecSep_0	

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

## QC Association Summary

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

Job ID: 160-51965-1  
SDG: 23100904

### Rad

#### Prep Batch: 634472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-51965-21	23100904-021	Total/NA	Water	PrecSep-21	
160-51965-22	23100904-022	Total/NA	Water	PrecSep-21	
160-51965-23	23100904-023	Total/NA	Water	PrecSep-21	
160-51965-24	23100904-024	Total/NA	Water	PrecSep-21	
160-51965-25	23100904-025	Total/NA	Water	PrecSep-21	
160-51965-26	23100904-026	Total/NA	Water	PrecSep-21	
160-51965-27	23100904-027	Total/NA	Water	PrecSep-21	
160-51965-28	23100904-028	Total/NA	Water	PrecSep-21	
160-51965-29	23100904-029	Total/NA	Water	PrecSep-21	
160-51965-30	23100904-030	Total/NA	Water	PrecSep-21	
160-51965-31	23100904-031	Total/NA	Water	PrecSep-21	
160-51965-32	23100904-032	Total/NA	Water	PrecSep-21	
160-51965-33	23100904-033	Total/NA	Water	PrecSep-21	
160-51965-34	23100904-034	Total/NA	Water	PrecSep-21	
160-51965-35	23100904-035	Total/NA	Water	PrecSep-21	
160-51965-36	23100904-036	Total/NA	Water	PrecSep-21	
160-51965-37	23100904-037	Total/NA	Water	PrecSep-21	
160-51965-38	23100904-038	Total/NA	Water	PrecSep-21	
160-51965-39	23100904-039	Total/NA	Water	PrecSep-21	
160-51965-40	23100904-040	Total/NA	Water	PrecSep-21	
MB 160-634472/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-634472/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
160-51965-21 DU	23100904-021	Total/NA	Water	PrecSep-21	

#### Prep Batch: 634473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-51965-21	23100904-021	Total/NA	Water	PrecSep_0	
160-51965-22	23100904-022	Total/NA	Water	PrecSep_0	
160-51965-23	23100904-023	Total/NA	Water	PrecSep_0	
160-51965-24	23100904-024	Total/NA	Water	PrecSep_0	
160-51965-25	23100904-025	Total/NA	Water	PrecSep_0	
160-51965-26	23100904-026	Total/NA	Water	PrecSep_0	
160-51965-27	23100904-027	Total/NA	Water	PrecSep_0	
160-51965-28	23100904-028	Total/NA	Water	PrecSep_0	
160-51965-29	23100904-029	Total/NA	Water	PrecSep_0	
160-51965-30	23100904-030	Total/NA	Water	PrecSep_0	
160-51965-31	23100904-031	Total/NA	Water	PrecSep_0	
160-51965-32	23100904-032	Total/NA	Water	PrecSep_0	
160-51965-33	23100904-033	Total/NA	Water	PrecSep_0	
160-51965-34	23100904-034	Total/NA	Water	PrecSep_0	
160-51965-35	23100904-035	Total/NA	Water	PrecSep_0	
160-51965-36	23100904-036	Total/NA	Water	PrecSep_0	
160-51965-37	23100904-037	Total/NA	Water	PrecSep_0	
160-51965-38	23100904-038	Total/NA	Water	PrecSep_0	
160-51965-39	23100904-039	Total/NA	Water	PrecSep_0	
160-51965-40	23100904-040	Total/NA	Water	PrecSep_0	
MB 160-634473/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-634473/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
160-51965-21 DU	23100904-021	Total/NA	Water	PrecSep_0	

# Tracer/Carrier Summary

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

Job ID: 160-51965-1  
SDG: 23100904

**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)
160-51965-1	23100904-001	87.2
160-51965-1 DU	23100904-001	88.9
160-51965-2	23100904-002	91.9
160-51965-3	23100904-003	75.6
160-51965-4	23100904-004	99.2
160-51965-5	23100904-005	86.9
160-51965-6	23100904-006	92.7
160-51965-7	23100904-007	40.3
160-51965-8	23100904-008	81.1
160-51965-9	23100904-009	69.8
160-51965-10	23100904-010	87.9
160-51965-11	23100904-011	90.7
160-51965-12	23100904-012	86.4
160-51965-13	23100904-013	85.4
160-51965-14	23100904-014	87.2
160-51965-15	23100904-015	56.7
160-51965-16	23100904-016	80.4
160-51965-17	23100904-017	86.9
160-51965-18	23100904-018	85.6
160-51965-19	23100904-019	86.6
160-51965-20	23100904-020	94.5
160-51965-21	23100904-021	81.9
160-51965-21 DU	23100904-021	81.1
160-51965-22	23100904-022	90.9
160-51965-23	23100904-023	82.4
160-51965-24	23100904-024	87.9
160-51965-25	23100904-025	84.6
160-51965-26	23100904-026	90.4
160-51965-27	23100904-027	96.0
160-51965-28	23100904-028	82.6
160-51965-29	23100904-029	89.9
160-51965-30	23100904-030	76.6
160-51965-31	23100904-031	88.4
160-51965-32	23100904-032	47.6
160-51965-33	23100904-033	88.9
160-51965-34	23100904-034	89.2
160-51965-35	23100904-035	81.1
160-51965-36	23100904-036	94.5
160-51965-37	23100904-037	82.9
160-51965-38	23100904-038	97.2
160-51965-39	23100904-039	88.4
160-51965-40	23100904-040	91.7
LCS 160-634469/2-A	Lab Control Sample	93.5
LCS 160-634472/2-A	Lab Control Sample	93.7
MB 160-634469/1-A	Method Blank	96.2
MB 160-634472/1-A	Method Blank	90.2

**Tracer/Carrier Legend**

Ba = Ba Carrier

# Tracer/Carrier Summary

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

Job ID: 160-51965-1  
SDG: 23100904

**Method: 904.0 - Radium-228 (GFPC)**

**Matrix: Water**

**Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	Y (30-110)
160-51965-1	23100904-001	87.2	78.1
160-51965-1 DU	23100904-001	88.9	80.4
160-51965-2	23100904-002	91.9	78.9
160-51965-3	23100904-003	75.6	77.4
160-51965-4	23100904-004	99.2	81.9
160-51965-5	23100904-005	86.9	78.5
160-51965-6	23100904-006	92.7	77.4
160-51965-7	23100904-007	40.3	82.6
160-51965-8	23100904-008	81.1	83.4
160-51965-9	23100904-009	69.8	81.1
160-51965-10	23100904-010	87.9	82.2
160-51965-11	23100904-011	90.7	83.4
160-51965-12	23100904-012	86.4	86.0
160-51965-13	23100904-013	85.4	81.9
160-51965-14	23100904-014	87.2	88.2
160-51965-15	23100904-015	56.7	83.4
160-51965-16	23100904-016	80.4	79.3
160-51965-17	23100904-017	86.9	92.0
160-51965-18	23100904-018	85.6	89.3
160-51965-19	23100904-019	86.6	82.6
160-51965-20	23100904-020	94.5	88.6
160-51965-21	23100904-021	81.9	77.4
160-51965-21 DU	23100904-021	81.1	79.3
160-51965-22	23100904-022	90.9	77.4
160-51965-23	23100904-023	82.4	77.0
160-51965-24	23100904-024	87.9	86.0
160-51965-25	23100904-025	84.6	75.5
160-51965-26	23100904-026	90.4	81.9
160-51965-27	23100904-027	96.0	76.6
160-51965-28	23100904-028	82.6	78.5
160-51965-29	23100904-029	89.9	77.8
160-51965-30	23100904-030	76.6	72.1
160-51965-31	23100904-031	88.4	80.4
160-51965-32	23100904-032	47.6	80.4
160-51965-33	23100904-033	88.9	78.1
160-51965-34	23100904-034	89.2	79.3
160-51965-35	23100904-035	81.1	75.1
160-51965-36	23100904-036	94.5	77.4
160-51965-37	23100904-037	82.9	79.6
160-51965-38	23100904-038	97.2	83.4
160-51965-39	23100904-039	88.4	79.6
160-51965-40	23100904-040	91.7	84.5
LCS 160-634471/2-A	Lab Control Sample	93.5	81.5
LCS 160-634473/2-A	Lab Control Sample	93.7	83.7
MB 160-634471/1-A	Method Blank	96.2	81.5
MB 160-634473/1-A	Method Blank	90.2	82.2

**Tracer/Carrier Legend**

Ba = Ba Carrier

Y = Y Carrier

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-001A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G01D	10/23/2023	12:35	1235	44.88		17	62.6	6.42	450.3	450.3	1.13	83.56	102.4	
G01D	10/23/2023	12:38	1238	44.88		16.9	62.42	6.42	454.6	454.6	1.25	41.37	101.6	
G01D	10/23/2023	12:41	1241	44.88		16.9	62.42	6.39	480	480	1.57	89.77	102.6	
G01D	10/23/2023	12:44	1244	44.88		16.9	62.42	6.4	484.1	484.1	1.83	175.01	102.6	

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

Site Sampling Event	Joppa 4Q														
LIMS Workorder	23100903-002A														
Technician	JC, TC, BG, JR														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
G02D	10/23/2023	13:26	1326	45.1		15.3	59.54	6.44	340.4	340.4	1.83	91.79	104.2		
G02D	10/23/2023	13:29	1329	45.1		15.3	59.54	6.43	340.8	340.8	2.19	94.41	105.4		
G02D	10/23/2023	13:32	1332	45.1		15.4	59.72	6.41	340.7	340.7	2.6	78.59	107		
G02D	10/23/2023	13:35	1335	45.1		15.4	59.72	6.4	340.9	340.9	2.9	90.89	108.5		



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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-003A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G03	10/23/2023	14:15	1415	39.89		16.2	61.16	6.41	446.2	446.2	3.41	59.39	132.3	
G03	10/23/2023	14:18	1418	39.89		16.4	61.52	6.4	430.8	430.8	3.49	73.33	131.8	
G03	10/23/2023	14:21	1421	39.89		16.4	61.52	6.4	417.7	417.7	3.59	80.07	130.7	
G03	10/23/2023	14:24	1424	39.89		16.4	61.52	6.4	411.1	411.1	3.66	108.22	129.8	

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-004A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G05	10/24/2023	13:54	1354	44.93		18.1	64.58	6.45	466	466	1.65	8.57	57.3	
G05	10/24/2023	13:57	1357	44.93		17.9	64.22	6.45	465.4	465.4	1.39	7.91	50.8	
G05	10/24/2023	14:00	1400	44.93		17.8	64.04	6.44	463.2	463.2	1.27	7.36	46.8	
G05	10/24/2023	14:03	1403	44.93		17.7	63.86	6.44	459.9	459.9	1.21	7.34	44.9	

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-005A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G06	10/24/2023	13:13	1313	41.92		15.7	60.26	6.59	596.5	596.5	0.98	22.99	117.7	
G06	10/24/2023	13:16	1316	41.92		15.7	60.26	6.58	594.3	594.3	0.87	20.37	117.4	
G06	10/24/2023	13:19	1319	41.92		15.7	60.26	6.57	594.1	594.1	0.8	18.72	116.7	
G06	10/24/2023	13:22	1322	41.92		15.7	60.26	6.57	593.4	593.4	0.76	18.17	116	

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

Site Sampling Event	Joppa 4Q														
LIMS Workorder	23100903-006A														
Technician	JC, TC, BG, JR														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
G07	10/24/2023	12:34	1234	42		15.9	60.62	6.44	713.6	713.6	1.31	5.95	132.7		
G07	10/24/2023	12:37	1237	42		15.8	60.44	6.42	709.5	709.5	1	7.71	131.9		
G07	10/24/2023	12:40	1240	42		15.8	60.44	6.41	708.7	708.7	0.88	10.38	130.9		

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-007A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G08	10/24/2023	12:47	1247	33.13		18.2	64.76	6.99	877.5	877.5	4.41	18.08	40.2	
G08	10/24/2023	12:50	1250	33.13		18.2	64.76	6.9	881.2	881.2	3.08	20.88	42.5	
G08	10/24/2023	12:53	1253	33.13		18.2	64.76	6.95	910	910	3.34	23.52	29.4	

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-008A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G09	10/25/2023	14:28	1428	41.91		18.1	64.58	6.32	595	595	1.5	9.35	-8.8	
G09	10/25/2023	14:31	1431	41.91		18.1	64.58	6.26	599.8	599.8	1.07	7.33	-6.1	
G09	10/25/2023	14:34	1434	41.91		18.1	64.58	6.23	601.3	601.3	0.9	8.07	-2.7	

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

Site Sampling Event	Joppa 4Q														
LIMS Workorder	23100903-009A														
Technician	JC, TC, BG, JR														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
G10	10/24/2023	12:18	1218	42.3		17.4	63.32	6.6	1107.9	1107.9	2.01	35.3	26.7		
G10	10/24/2023	12:21	1221	42.3		17.4	63.32	6.6	1102.7	1102.7	1.63	41.1	24.7		
G10	10/24/2023	12:24	1224	42.3		17.4	63.32	6.6	1097.9	1097.9	1.49	46.25	23.1		

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-010A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G11	10/24/2023	11:09	1109	49.32		18.1	64.58	6.01	628.1	628.1	5.63	10.24	98.7	
G11	10/24/2023	11:12	1112	49.32		17.9	64.22	5.91	639.9	639.9	4	11	109.4	
G11	10/24/2023	11:15	1115	49.32		17.9	64.22	5.89	626.7	626.7	2.95	34.21	115.5	
G11	10/24/2023	11:18	1118	49.32		18	64.4	5.88	611.3	611.3	2.43	48.33	119.9	
G11	10/24/2023	11:21	1121	49.32		18	64.4	5.88	600.1	600.1	2.23	8.95	123.8	



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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-011A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G12D	10/24/2023	11:56	1156	48.55		15.7	60.26	6.66	542	542	2.07	5.22	116.3	
G12D	10/24/2023	11:59	1159	48.55		15.6	60.08	6.63	541.3	541.3	1.3	5.38	116.5	
G12D	10/24/2023	12:02	1202	48.55		15.6	60.08	6.62	540.9	540.9	1.03	4.37	116.3	
G12D	10/24/2023	12:05	1205	48.55		15.6	60.08	6.61	540.3	540.3	0.91	3.37	115.8	

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-012A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G12S	10/24/2023	11:19	1119	48.71		15.4	59.72	6.53	539.4	539.4	1.22	2.52	118	
G12S	10/24/2023	11:22	1122	48.71		15.4	59.72	6.52	539	539	0.98	2.83	117.3	
G12S	10/24/2023	11:25	1125	48.71		15.4	59.72	6.51	538.6	538.6	0.88	2.57	115.9	

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-013A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G13D	10/24/2023	10:46	1046	43.39		15.3	59.54	6.61	521.6	521.6	1.97	1.4	110.9	
G13D	10/24/2023	10:49	1049	43.39		15.2	59.36	6.59	521.1	521.1	1.17	1.06	111.2	
G13D	10/24/2023	10:52	1052	43.39		15.2	59.36	6.58	520.4	520.4	0.9	0.61	111.3	

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-014A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G13S	10/24/2023	10:21	1021	43.44		15.2	59.36	6.53	523.6	523.6	1.44	1.41	106.1	
G13S	10/24/2023	10:24	1024	43.44		15.2	59.36	6.52	523.1	523.1	1.09	1.17	106.9	
G13S	10/24/2023	10:27	1027	43.44		15.2	59.36	6.51	522.4	522.4	0.96	0.63	107.2	

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-015A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G151	10/25/2023	9:26	0926	40.37		18.3	64.94	5.53	316	316	7.66	10.05	177.2	
G151	10/25/2023	9:29	0929	40.37		18.6	65.48	5.53	316.8	316.8	7.65	9.63	178.4	
G151	10/25/2023	9:32	0932	40.37		19.1	66.38	5.53	317.1	317.1	7.64	8.91	178.9	
G151	10/25/2023	9:35	0935	40.37		19.1	66.38	5.57	317	317	7.95	48.84	175.9	
G151	10/25/2023	9:38	0938	40.37		18.8	65.84	5.57	319.2	319.2	7.52	62.08	175.4	
G151	10/25/2023	9:41	0941	40.37		18.8	65.84	5.57	318.9	318.9	7.38	81.08	175.3	

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-016A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G153	10/25/2023	13:19	1319	38.42		17.9	64.22	6.94	417.6	417.6	8.92	17.9	58.3	
G153	10/25/2023	13:22	1322	38.42		18	64.4	6.89	417.1	417.1	8.95	11.91	63.4	
G153	10/25/2023	13:25	1325	38.42		18.1	64.58	6.86	418.9	418.9	8.91	9.88	67.6	

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-017A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond ( $\mu\text{S}/\text{cm}$ )	Sp Cond ( $\mu\text{mhos}/\text{cm}$ @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G16S	10/24/2023	9:49	0949	45.98		14.6	58.28	6.57	771.5	771.5	1.35	9.32	128.4	
G16S	10/24/2023	9:52	0952	45.98		14.6	58.28	6.54	770.8	770.8	1.09	4.7	126	
G16S	10/24/2023	9:55	0955	45.98		14.6	58.28	6.54	769.4	769.4	0.91	4.17	124	

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

Site Sampling Event	Joppa 4Q														
LIMS Workorder	23100903-018A														
Technician	JC, TC, BG, JR														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
G18S	10/23/2023	11:59	1159	39.5		17.1	62.78	6.37	472.8	472.8	3.94	13.62	155.6		
G18S	10/23/2023	12:02	1202	39.5		17.5	63.5	6.41	461.9	461.9	3.32	11.33	151.7		
G18S	10/23/2023	12:05	1205	39.5		17.7	63.86	6.44	457	457	3.03	9.56	148.9		



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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-019A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G19D	10/23/2023	13:13	1313	47.18		19.7	67.46	7.15	470.8	470.8	8.57	4.36	139.9	
G19D	10/23/2023	13:16	1316	47.18		18.2	64.76	6.71	466.8	466.8	5.05	3.87	145.3	
G19D	10/23/2023	13:19	1319	47.18		17.6	63.68	6.64	467	467	4.42	3.77	146.5	

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-020A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond ( $\mu\text{S}/\text{cm}$ )	Sp Cond ( $\mu\text{mhos}/\text{cm}$ @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G19S	10/23/2023	12:57	1257	47.29		16.6	61.88	6.54	583.5	583.5	5.13	2.8	151.1	
G19S	10/23/2023	13:00	1300	47.29		16.3	61.34	6.47	585.5	585.5	4.1	2.59	151.1	
G19S	10/23/2023	13:03	1303	47.29		16.3	61.34	6.45	586.3	586.3	3.72	1.56	150.7	

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-021A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G20D	10/24/2023	9:18	0918	45.48		15.3	59.54	6.69	487.3	487.3	3.61	2.76	110.6	
G20D	10/24/2023	9:21	0921	45.48		15.3	59.54	6.67	485.9	485.9	2.43	11.41	110.9	
G20D	10/24/2023	9:24	0924	45.48		15.2	59.36	6.66	485.4	485.4	1.64	10.79	110.1	
G20D	10/24/2023	9:27	0927	45.48		15.2	59.36	6.66	484.8	484.8	1.26	7.13	109.3	

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-022A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G20S	10/24/2023	8:53	0853	44.91		15.1	59.18	6.33	488	488	4.31	2.39	107.3	
G20S	10/24/2023	8:56	0856	44.91		15.1	59.18	6.33	486.9	486.9	4.16	1.46	109.7	
G20S	10/24/2023	8:59	0859	44.91		15.1	59.18	6.34	486.1	486.1	4.06	1.29	111.5	
G20S	10/24/2023	9:02	0902	44.91		15.1	59.18	6.35	485.3	485.3	3.95	0.92	112.8	

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-023A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G21D	10/23/2023	15:24	1524	46.59		16.1	60.98	7.12	717.4	717.4	5.29	9.06	150.8	
G21D	10/23/2023	15:27	1527	46.59		16.1	60.98	7.01	717.7	717.7	4.7	9.27	133.2	
G21D	10/23/2023	15:30	1530	46.59		15.9	60.62	6.96	717.5	717.5	4.27	7.7	85.9	

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-024A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G21S	10/23/2023	15:02	1502	47.09		15.6	60.08	6.71	834.7	834.7	5.43	2.73	151.4	
G21S	10/23/2023	15:05	1505	47.09		15.9	60.62	6.66	831.8	831.8	4.81	3.08	154.3	
G21S	10/23/2023	15:08	1508	47.09		15.8	60.44	6.63	831.1	831.1	4.27	3.31	155.9	

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

Site Sampling Event	Joppa 4Q														
LIMS Workorder	23100903-025A														
Technician	JC, TC, BG, JR														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
G22D	10/23/2023	14:34	1434	47.2		17.2	62.96	7.18	435.3	435.3	4.29	3.01	148.8		
G22D	10/23/2023	14:37	1437	47.2		16.8	62.24	6.88	434.7	434.7	2.41	1.77	150.4		
G22D	10/23/2023	14:40	1440	47.2		16.7	62.06	6.72	435	435	1.84	1.86	151		

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-026A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G22S	10/23/2023	14:13	1413	47.12		17.1	62.78	6.65	473.5	473.5	6.19	1.98	152.9	
G22S	10/23/2023	14:16	1416	47.12		17.1	62.78	6.6	473.1	473.1	5.1	7.83	153.4	
G22S	10/23/2023	14:19	1419	47.12		17.1	62.78	6.58	472.6	472.6	4.26	5.67	153.1	



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

Site Sampling Event	Joppa 4Q														
LIMS Workorder	23100903-027A														
Technician	JC, TC, BG, JR														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
G23S	10/23/2023	12:28	1228	46.6		16.8	62.24	6.66	392.2	392.2	5.52	8.07	114.6		
G23S	10/23/2023	12:31	1231	46.6		17.1	62.78	6.58	391.9	391.9	4.92	8.06	121.6		
G23S	10/23/2023	12:34	1234	46.6		16.9	62.42	6.56	392.1	392.1	4.58	9.09	126		

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-028A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G24S	10/23/2023	13:48	1348	48.97		17.6	63.68	6.56	426.4	426.4	4.05	12.38	145.7	
G24S	10/23/2023	13:51	1351	48.97		17.4	63.32	6.55	426.4	426.4	4	9.04	145.1	
G24S	10/23/2023	13:54	1354	48.97		17.4	63.32	6.55	426	426	3.96	7.56	144.9	

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-029A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G51D	10/25/2023	8:36	0836	46.09		17.2	62.96	5.27	332.6	332.6	2.08	3.88	165.1	
G51D	10/25/2023	8:39	0839	46.09		17.1	62.78	5.27	332.2	332.2	1.96	4.11	168.1	
G51D	10/25/2023	8:42	0842	46.09		17.1	62.78	5.28	331.8	331.8	1.89	3.98	170.5	

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

Site Sampling Event	Joppa 4Q														
LIMS Workorder	23100903-030A														
Technician	JC, TC, BG, JR														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
G52D	10/24/2023	10:13	1013	31.05		16.6	61.88	6.57	411.5	411.5	4.61	1.77	46.5		
G52D	10/24/2023	10:16	1016	31.05		16.6	61.88	6.43	402.1	402.1	2.95	1.66	27.6		
G52D	10/24/2023	10:19	1019	31.05		16.6	61.88	6.33	393.6	393.6	2	1.57	9.4		
G52D	10/24/2023	10:22	1022	31.05		16.6	61.88	6.33	392.7	392.7	1.51	1.59	-0.7		

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-031A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G53D	10/25/2023	13:53	1353	39.82		17.8	64.04	6.56	413.3	413.3	1.09	6.74	49	
G53D	10/25/2023	13:56	1356	39.82		17.7	63.86	6.51	412.9	412.9	0.77	5.27	49.2	
G53D	10/25/2023	13:59	1359	39.82		17.7	63.86	6.49	411.5	411.5	0.68	4.65	48.9	

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-032A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
G54D	10/25/2023	12:37	1237	44.45		17.4	63.32	6.63	639.7	639.7	0.74	516.45	-49.1	
G54D	10/25/2023	12:40	1240	44.45		17.1	62.78	6.59	640.1	640.1	0.64	223.12	-41.3	
G54D	10/25/2023	12:43	1243	44.45		17.2	62.96	6.57	640.5	640.5	0.57	165.89	-35.9	
G54D	10/25/2023	12:46	1246	44.45		17.2	62.96	6.56	642.7	642.7	0.53	190.74	-31.9	

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

Site Sampling Event	Joppa 4Q
LIMS Workorder	23100903-033A
Technician	JC, TC, BG, JR

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
---------	------	------	------------	-----	----------	--------------	--------------	---------	-----------------	-------------------------	------------	-----------------	----------	--------------------

G54S

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

Site Sampling Event	Joppa 4Q
LIMS Workorder	23100903-034A
Technician	JC, TC, BG, JR
Well ID	Date

Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
------	------------	-----	----------	--------------	--------------	---------	-----------------	-------------------------	------------	-----------------	----------	--------------------

SG02



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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-035A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
Well 2	10/24/2023	9:00	0900	47.45		19.7	67.46	6.25	750.7	750.7	5.45	7.25	161.5	
Well 2	10/24/2023	9:03	0903	47.45		19.6	67.28	6.21	760.2	760.2	4.68	11.67	164	
Well 2	10/24/2023	9:06	0906	47.45		19.6	67.28	6.19	763.6	763.6	4.17	11.6	165.3	

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

Site Sampling Event	Joppa 4Q														
LIMS Workorder	23100903-036A														
Technician	JC, TC, BG, JR														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
Well 3	10/24/2023	9:38	0938	34.17		16.1	60.98	6.54	933.4	933.4	6.91	22.3	170.3		
Well 3	10/24/2023	9:41	0941	34.17		16.2	61.16	6.54	934.8	934.8	6.87	19.77	170.5		
Well 3	10/24/2023	9:44	0944	34.17		16.2	61.16	6.54	934.7	934.7	6.85	19.22	170.8		

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-037A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
XPW01	10/25/2023	11:07	1107	17.94		18.9	66.02	7.64	806.1	806.1	2.59	3.65	-121.7	
XPW01	10/25/2023	11:10	1110	17.94		19.1	66.38	8.05	803.3	803.3	2.13	3.31	-151.4	
XPW01	10/25/2023	11:13	1113	17.94		19.2	66.56	8.25	800.1	800.1	1.61	3.68	-164.1	
XPW01	10/25/2023	11:16	1116	17.94		19.3	66.74	8.41	802.8	802.8	1.23	3.11	-177.1	

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

Site Sampling Event	Joppa 4Q														
LIMS Workorder	23100903-038A														
Technician	JC, TC, BG, JR														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
XPW02	10/25/2023	11:57	1157	8.25		18.7	65.66	7.74	4091.2	4091.2	0.96	4.59	-154.3		
XPW02	10/25/2023	12:00	1200	8.25		18.7	65.66	7.8	4128.1	4128.1	0.75	4.66	-171.3		
XPW02	10/25/2023	12:03	1203	8.25		18.7	65.66	7.83	4142.3	4142.3	0.66	7.37	-180.2		

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

Site Sampling Event	Joppa 4Q													
LIMS Workorder	23100903-039A													
Technician	JC, TC, BG, JR													
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
XPW03	10/25/2023	10:16	1016	15.24		19.3	66.74	10.84	551	551	2.75	1.69	-79.8	
XPW03	10/25/2023	10:19	1019	15.24		19.4	66.92	10.85	555.1	555.1	2.4	1.64	-82.2	
XPW03	10/25/2023	10:22	1022	15.24		19.3	66.74	10.85	559.7	559.7	2.27	1.72	-82.8	
XPW03	10/25/2023	10:25	1025	15.24		19.3	66.74	10.85	562.9	562.9	2.12	1.71	-88.5	

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

Site Sampling Event	Joppa 4Q
LIMS Workorder	23100903-040A
Technician	JC, TC, BG, JR

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
---------	------	------	------------	-----	----------	--------------	--------------	---------	-----------------	-------------------------	------------	-----------------	----------	--------------------

XSG01

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

Site Sampling Event	Joppa 4Q
LIMS Workorder	23100903-041A
Technician	JC, TC, BG, JR

Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (μS/cm)	Sp Cond (μmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)
---------	------	------	------------	-----	----------	--------------	--------------	---------	-----------------	-------------------------	------------	-----------------	----------	--------------------

Field Blank

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

Site Sampling Event	Joppa 4Q														
LIMS Workorder	23100903-042A														
Technician	JC, TC, BG, JR														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
G52D Duplicate	10/24/2023	10:13	1013	31.1		16.6	61.88	6.57	411.5	411.5	4.61	1.77	46.5		
G52D Duplicate	10/24/2023	10:16	1016	31.1		16.6	61.88	6.43	402.1	402.1	2.95	1.66	27.6		
G52D Duplicate	10/24/2023	10:19	1019	31.1		16.6	61.88	6.33	393.6	393.6	2	1.57	9.4		
G52D Duplicate	10/24/2023	10:22	1022	31.1		16.6	61.88	6.33	392.7	392.7	1.51	1.59	-0.7		



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

Site Sampling Event	Joppa 4Q														
LIMS Workorder	23100903-043A														
Technician	JC, TC, BG, JR														
Well ID	Date	Time	Time (adj)	DTW	Drawdown	Temp (deg C)	Temp (deg F)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	Purge Volume (gal)	
G12S Duplicate	10/24/2023	11:19	1119	48.7		15.4	59.72	6.53	539.4	539.4	1.22	2.52	118		
G12S Duplicate	10/24/2023	11:22	1122	48.7		15.4	59.72	6.52	539	539	0.98	2.83	117.3		
G12S Duplicate	10/24/2023	11:25	1125	48.7		15.4	59.72	6.51	538.6	538.6	0.88	2.57	115.9		

## Field Calibration Log

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 029218            
Technician:           Tracy Carroll          

Tracy

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230720G	4.03	10/23/23 11:59
7.0 Buffer	WC230616F	7.08	10/23/23 12:02
10.0 Buffer	WC230504C	10.10	10/23/23 12:07
LCS (7.0 Buffer)	WC230504B		

Conductivity Standard	LIMS ID/Lot#	Reading	Date/Time
1412 µS Std.	87241	1412	10/23/23 12:11

Sample ID	Date/Time	Temp. °C	pH	Conductivity µS	Comments
LCS	10/23/23 12:20	18.8	7.05	1410	
ccv	10/23/23 15:23	22.3	7.04	1453	

Field Meter ID:           Pine 029218            
Technician:           Tracy Carroll          

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230720G	4.00	10/24/23 8:23
7.0 Buffer	WC230616F	7.03	10/24/23 8:24
10.0 Buffer	WC230504C	10.08	10/24/23 8:26
LCS (7.0 Buffer)	WC230504B		

Conductivity Standard	LIMS ID/Lot#	Reading	Date/Time
1412 µS Std.	87241	1412	10/24/23 8:20

Sample ID	Date/Time	Temp. °C	pH	Conductivity µS	Comments
LCS	10/24/23 8:41	18.2	7.08	1412	
ccv	10/24/23 14:55	22.8	7.09	1471	

Field Meter ID:           Pine 029218            
Technician:           Tracy Carroll          

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230720G	4.03	10/25/23 8:03
7.0 Buffer	WC230616F	7.10	10/25/23 8:15
10.0 Buffer	WC230504C	10.00	10/25/23 8:17
LCS (7.0 Buffer)	WC230504B		

Conductivity Standard	LIMS ID/Lot#	Reading	Date/Time
1412 µS Std.	87241	1412	10/25/23 8:00

Sample ID	Date/Time	Temp. °C	pH	Conductivity µS	Comments
LCS	10/25/23 8:24	19.6	7.10	1412	
ccv	10/25/23 14:40	24.5	7.10	1496	

## Field Calibration Log

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: 51290  
Technician: Justin Colp

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230720g	4.01	10/23/23 11:33
7.0 Buffer	wc230616f	7.02	10/23/23 11:37
10.0 Buffer	wc230504c	9.99	10/23/23 11:42
LCS (7.0 Buffer)	wc230504b		

Conductivity Standard	LIMS ID/Lot#	Reading	Date/Time
1412 µS Std.	87241	1413	10/23/23 11:46

Sample ID	Date/Time	Temp. °C	pH	Conductivity µS	Comments
LCS	10/23/23 11:51	20.1	7.01	1415	
ccv	10/23/23 15:34	20.9	7.03	1423	

Field Meter ID: 51290  
Technician: Justin Colp

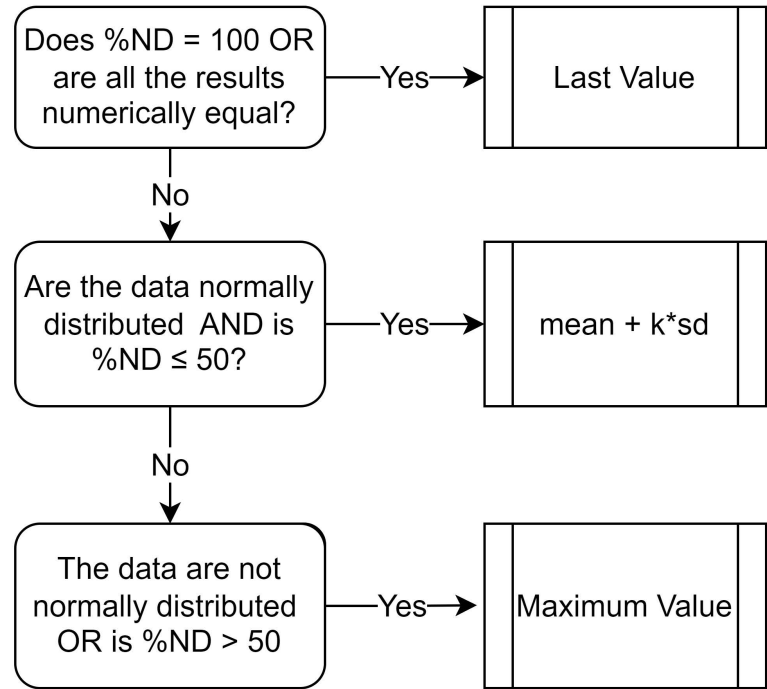
pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230720g	4.00	10/24/23 8:03
7.0 Buffer	wc230616f	7.01	10/24/23 8:09
10.0 Buffer	wc230504c	10.00	10/24/23 8:17
LCS (7.0 Buffer)	wc230504b		

Conductivity Standard	LIMS ID/Lot#	Reading	Date/Time
1412 µS Std.	87241	1416	10/24/23 8:24

Sample ID	Date/Time	Temp. °C	pH	Conductivity µS	Comments
LCS	10/24/23 8:31	19.2	7.01	1419	
ccv	10/24/23 13:10	21.4	7.03	1435	

**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

