Prepared for
Electric Energy, Inc.

Date
January 31, 2025

Project No.
1940106781-009

2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

LANDFILL

JOPPA POWER PLANT

JOPPA, ILLINOIS

CCR UNIT 402

RAMBOLL Bright ideas. Sustainable change.

2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT JOPPA POWER PLANT LANDFILL

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ACRONYMS AND ABBREVIATIONS

40 C.F.R.	Title 40 of the Code of Federal Regulations
ASD	Alternative Source Demonstration
CCR	coal combustion residuals
GWPS	groundwater protection standard
D13	Quarter 3, 2023 Detection Monitoring sampling event
D14	Quarter 1, 2024 Detection Monitoring sampling event
D15	Quarter 3, 2024 Detection Monitoring sampling event
JPP	Joppa Power Plant
NA	not applicable
Ramboll	Ramboll Americas Engineering Solutions, Inc.
SAP	Sampling and Analysis Plan
SSI	statistically significant increase
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 Landfill located at the Joppa Power Plant (JPP) near Joppa, Illinois.

Groundwater is being monitored at the Landfill in accordance with the Detection Monitoring Program requirements specified in 40 C.F.R. § 257.94.

No changes were made to the monitoring system in 2024 (no wells were installed or decommissioned).

No Statistically Significant Increases (SSIs) of 40 C.F.R. § 257 Appendix III parameter concentrations greater than background concentrations were determined and the Landfill remains in the Detection 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 Landfill located at the JPP near Joppa, Illinois.

In accordance with 40 C.F.R. § 257.90(e), the owner or operator of a coal combustion residuals (CCR) unit must prepare an Annual Groundwater Monitoring and Corrective Action Report for the preceding calendar year that documents the status of the Groundwater Monitoring and Corrective Action Program for the CCR unit (**Section 2**), summarizes key actions completed (**Section 3**), describes any problems encountered and actions to resolve the problems (**Section 4**), and projects key activities for the upcoming year (**Section 5**). At a minimum, the annual report must contain the following information, to the extent available:

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

B. Provide the date when the Assessment Monitoring Program was initiated for the CCR unit.

iv. If it was determined that there was a statistically significant level above the groundwater protection standard (GWPS) for one or more constituents listed in Appendix IV of §257 pursuant to §257.95(g) include all of the following:

A. Identify those constituents listed in Appendix IV of §257 and the names of the monitoring wells associated with such an increase.

B. Provide the date when the assessment of corrective measures was initiated for the CCR unit.

C. Provide the date when the public meeting was held for the assessment of corrective measures for the CCR unit.

D. Provide the date when the assessment of corrective measures was completed for the CCR unit.

v. Whether a remedy was selected pursuant to §257.97 during the current annual reporting period, and if so, the date of remedy selection.

vi. Whether remedial activities were initiated or are ongoing pursuant to § 257.98 during the current annual reporting period.

This report provides the required information for the Landfill for calendar year 2024.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

No changes have occurred to the monitoring program status in calendar year 2024 and the Landfill remains in the Detection Monitoring Program in accordance with 40 C.F.R. § 257.94.

3. KEY ACTIONS COMPLETED IN 2024

A summary of the samples collected from background and compliance monitoring wells in 2024 under the Detection Monitoring Program is summarized in **Table A** on the following page. The groundwater monitoring system, including the CCR unit and all background and compliance monitoring wells, is presented in **Figure 1**. A Groundwater Monitoring Plan was developed for the Landfill in 2023; no changes were made to the monitoring system (Ramboll, 2023a).

One groundwater sample was collected from each background and compliance well during each monitoring event. All samples were collected and analyzed in accordance with the Multi-Site Sampling and Analysis Plan (SAP) (Ramboll, 2023b).

Potentiometric surfaces for the semi-annual sampling events are included in **Figures 2 and 3**. All monitoring data and analytical results obtained under 40 C.F.R. § 257.90 through 257.98 in 2024 are presented in **Tables 1 and 2**. All associated laboratory reports and field data sheets are included in **Appendix A**.

Analytical data were evaluated in accordance with the Multi-Site Statistical Analysis Plan (Ramboll 2022a), the Multi-Site Quality Assurance Project Plan (Ramboll, 2022b), and the Multi-Site Data Management Plan (Ramboll, 2022c) to determine any SSIs of Appendix III parameters relative to background concentrations. SSIs are summarized in **Table A** and highlighted in **Table 2**. Statistical background values are provided in **Table 3**. A flow chart showing the statistical methodology for determination of background values is included as **Appendix B**.

No SSIs were reported in 2024 and the Landfill remains in the Detection Monitoring Program.

Table A. 2024 Detection Monitoring Program Summary

Event ID	Sampling Dates [1, 2, 3]	Analytical Data Receipt Date	SSI(s) Determination Date	SSI(s)	ASD Completion Date
D13 [4]	September 26-28, 2023	November 16, 2023	February 14, 2024 [5]	None	NA
D14	January 31 - February 1, 2024	March 4, 2024	June 2, 2024	None	NA
D15	July 23-24, 2024	August 12, 2024	November 10, 2024	None	NA

Notes:

ASD: Alternative Source Demonstration

NA: not applicable

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

[2] The following background wells were sampled for each event: G101 and G102

[3] The following compliance wells were sampled for each event: G105, G107, G109, and G111

[4] Laboratory reports and associated analytical data tables were included in the 2023 Annual Groundwater Monitoring and Corrective Action Report.

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

4. PROBLEMS ENCOUNTERED AND ACTIONS TO RESOLVE THE PROBLEMS

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

5. KEY ACTIVITIES PLANNED FOR 2025

The following key activities are planned for 2025:

- Continuation of the Detection Monitoring Program with semiannual sampling scheduled for the first and third quarters of 2025.
- Complete evaluation of analytical data from the compliance wells using background data to determine whether an SSI of Appendix III parameters detected at concentrations greater than background concentrations has occurred.
- If an SSI is identified, potential alternative sources (*i.e.,* a source other than the CCR unit caused the SSI or that the SSI 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 SSI, a written demonstration will be completed within 90 days of SSI determination and included in the 2025 Annual Groundwater Monitoring and Corrective Action Report.
  - If an alternative source(s) is not identified to be the cause of the SSI, the applicable requirements of 40 C.F.R. §§ 257.94 through 257.98 as may apply in 2025 (*e.g.,* Assessment Monitoring) will be met, including associated recordkeeping/notifications required by 40 C.F.R. §§ 257.105 through 257.108.

6. REFERENCES

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

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

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

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

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2023a. Groundwater Monitoring Plan, Joppa Power Plant, Landfill, Joppa, Illinois, Electric Energy, Inc. December 31, 2023.

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

TABLES

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

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G101	Background	UA	01/29/2024	47.23	328.06
G101	Background	UA	04/22/2024	48.21	327.08
G101	Background	UA	07/22/2024	45.92	329.37
G101	Background	UA	10/21/2024	43.68	331.59
G102	Background	UA	01/29/2024	59.79	327.52
G102	Background	UA	04/22/2024	61.23	326.08
G102	Background	UA	07/22/2024	58.35	328.96
G102	Background	UA	10/21/2024	59.13	327.76
G105	Compliance	UA	01/29/2024	56.43	324.30
G105	Compliance	UA	04/22/2024	55.13	325.60
G105	Compliance	UA	07/22/2024	55.18	325.55
G105	Compliance	UA	10/21/2024	56.21	324.42
G107	Compliance	UA	01/29/2024	55.20	322.13
G107	Compliance	UA	04/22/2024	52.79	324.54
G107	Compliance	UA	07/22/2024	53.99	323.34
G107	Compliance	UA	10/21/2024	57.49	319.61
G109	Compliance	UA	01/29/2024	51.10	324.89
G109	Compliance	UA	07/22/2024	50.54	325.45
G109	Compliance	UA	10/21/2024	52.18	323.62
G111	Compliance	UA	01/29/2024	50.79	322.85
G111	Compliance	UA	04/22/2024	48.70	324.94
G111	Compliance	UA	07/22/2024	49.27	324.37
G111	Compliance	UA	10/21/2024	50.77	322.96

Notes:
BMP = below measuring point
Depth to Groundwater/Groundwater Elevation Code (if applicable):
DM[1] = Depth to water was not measured.
DM[2] = Depth to water was not measured because water was above or below the staff gage markings.
DM[3] = Depth to water was not measured because the location was inaccessible.
DM[4] = Depth to water was not measured because water level was below the top of the pump.
DM[5] = Depth to water was not measured because water level was above the top of casing (artesian well).
DM[6] = Depth to water was not measured because of damage to the well.
DM[7] = Depth to water was not measured due to required pressure transducer maintenance.
DM[8] = Lab provided groundwater elevation data and not depth to water.
NAVD88 = North American Vertical Datum of 1988
Monitored Unit Abbreviations:
UA = uppermost aquifer

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

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
G101	UA	Background	09/27/2023	D13	Boron, total	mg/L	0.0427	--	--	--
G101	UA	Background	01/31/2024	D14	Boron, total	mg/L	0.03 UJ	--	--	--
G101	UA	Background	07/23/2024	D15	Boron, total	mg/L	0.0250 J	--	--	--
G101	UA	Background	09/27/2023	D13	Calcium, total	mg/L	23.1	--	--	--
G101	UA	Background	01/31/2024	D14	Calcium, total	mg/L	11.3	--	--	--
G101	UA	Background	07/23/2024	D15	Calcium, total	mg/L	13.0	--	--	--
G101	UA	Background	09/27/2023	D13	Chloride, total	mg/L	2 J	--	--	--
G101	UA	Background	01/31/2024	D14	Chloride, total	mg/L	6.00 J+	--	--	--
G101	UA	Background	07/23/2024	D15	Chloride, total	mg/L	3 J	--	--	--
G101	UA	Background	09/27/2023	D13	Fluoride, total	mg/L	0.360	--	--	--
G101	UA	Background	01/31/2024	D14	Fluoride, total	mg/L	0.290	--	--	--
G101	UA	Background	07/23/2024	D15	Fluoride, total	mg/L	0.390 J+	--	--	--
G101	UA	Background	09/27/2023	D13	pH (field)	SU	6.4	--	--	--
G101	UA	Background	01/31/2024	D14	pH (field)	SU	6.5	--	--	--
G101	UA	Background	07/23/2024	D15	pH (field)	SU	6.7	--	--	--
G101	UA	Background	09/27/2023	D13	Sulfate, total	mg/L	39.0	--	--	--
G101	UA	Background	01/31/2024	D14	Sulfate, total	mg/L	40.0	--	--	--
G101	UA	Background	07/23/2024	D15	Sulfate, total	mg/L	56.0	--	--	--
G101	UA	Background	09/27/2023	D13	Total Dissolved Solids	mg/L	700	--	--	--
G101	UA	Background	01/31/2024	D14	Total Dissolved Solids	mg/L	220	--	--	--
G101	UA	Background	07/23/2024	D15	Total Dissolved Solids	mg/L	500	--	--	--
G102	UA	Background	09/27/2023	D13	Boron, total	mg/L	0.03 UJ	--	--	--
G102	UA	Background	01/31/2024	D14	Boron, total	mg/L	0.03 UJ	--	--	--
G102	UA	Background	07/23/2024	D15	Boron, total	mg/L	0.0092 U	--	--	--
G102	UA	Background	09/27/2023	D13	Calcium, total	mg/L	9.31	--	--	--
G102	UA	Background	01/31/2024	D14	Calcium, total	mg/L	8.72	--	--	--
G102	UA	Background	07/23/2024	D15	Calcium, total	mg/L	9.70	--	--	--
G102	UA	Background	09/27/2023	D13	Chloride, total	mg/L	4.00	--	--	--
G102	UA	Background	01/31/2024	D14	Chloride, total	mg/L	4.00 J+	--	--	--
G102	UA	Background	07/23/2024	D15	Chloride, total	mg/L	4.00	--	--	--
G102	UA	Background	09/27/2023	D13	Fluoride, total	mg/L	0.200	--	--	--
G102	UA	Background	01/31/2024	D14	Fluoride, total	mg/L	0.170	--	--	--
G102	UA	Background	07/23/2024	D15	Fluoride, total	mg/L	0.220 J+	--	--	--
G102	UA	Background	09/27/2023	D13	pH (field)	SU	6.3	--	--	--
G102	UA	Background	01/31/2024	D14	pH (field)	SU	6.3	--	--	--
G102	UA	Background	07/23/2024	D15	pH (field)	SU	6.5	--	--	--
G102	UA	Background	09/27/2023	D13	Sulfate, total	mg/L	29.0	--	--	--
G102	UA	Background	01/31/2024	D14	Sulfate, total	mg/L	29.0	--	--	--
G102	UA	Background	07/23/2024	D15	Sulfate, total	mg/L	28.0	--	--	--
G102	UA	Background	09/27/2023	D13	Total Dissolved Solids	mg/L	200	--	--	--
G102	UA	Background	01/31/2024	D14	Total Dissolved Solids	mg/L	202	--	--	--
G102	UA	Background	07/23/2024	D15	Total Dissolved Solids	mg/L	236	--	--	--
G105	UA	Compliance	09/27/2023	D13	Boron, total	mg/L	0.0092 U	0.025	DQR	No Exceedance
G105	UA	Compliance	01/31/2024	D14	Boron, total	mg/L	0.03 UJ	0.025	DQR	No Exceedance
G105	UA	Compliance	07/24/2024	D15	Boron, total	mg/L	0.0092 U	0.025	DQR	No Exceedance
G105	UA	Compliance	09/27/2023	D13	Calcium, total	mg/L	29.0	29.0	45.3	No Exceedance

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

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
G105	UA	Compliance	01/31/2024	D14	Calcium, total	mg/L	24.0	24.0	45.3	No Exceedance
G105	UA	Compliance	07/24/2024	D15	Calcium, total	mg/L	29.4	29.4	45.3	No Exceedance
G105	UA	Compliance	09/27/2023	D13	Chloride, total	mg/L	48.0	48.0	58.8	No Exceedance
G105	UA	Compliance	01/31/2024	D14	Chloride, total	mg/L	38.0	38.0	58.2	No Exceedance
G105	UA	Compliance	07/24/2024	D15	Chloride, total	mg/L	61.0	61.0	61.0	No Exceedance
G105	UA	Compliance	09/27/2023	D13	Fluoride, total	mg/L	0.160	0.160	0.290	No Exceedance
G105	UA	Compliance	01/31/2024	D14	Fluoride, total	mg/L	0.140	0.140	0.290	No Exceedance
G105	UA	Compliance	07/24/2024	D15	Fluoride, total	mg/L	0.180 J+	0.180	0.290	No Exceedance
G105	UA	Compliance	09/27/2023	D13	pH (field)	SU	6.2	6.2	5.9/6.6	No Exceedance
G105	UA	Compliance	01/31/2024	D14	pH (field)	SU	6.0	6.0	5.9/6.6	No Exceedance
G105	UA	Compliance	07/24/2024	D15	pH (field)	SU	6.3	6.3	5.9/6.6	No Exceedance
G105	UA	Compliance	09/27/2023	D13	Sulfate, total	mg/L	19.0	19.0	19.0	No Exceedance
G105	UA	Compliance	01/31/2024	D14	Sulfate, total	mg/L	13.0	13.0	19.0	No Exceedance
G105	UA	Compliance	07/24/2024	D15	Sulfate, total	mg/L	15.0	15.0	19.0	No Exceedance
G105	UA	Compliance	09/27/2023	D13	Total Dissolved Solids	mg/L	266	266	268	No Exceedance
G105	UA	Compliance	01/31/2024	D14	Total Dissolved Solids	mg/L	228	228	268	No Exceedance
G105	UA	Compliance	07/24/2024	D15	Total Dissolved Solids	mg/L	278	278	278	No Exceedance
G107	UA	Compliance	09/28/2023	D13	Boron, total	mg/L	0.03 UJ	0.025	0.0373	No Exceedance
G107	UA	Compliance	02/01/2024	D14	Boron, total	mg/L	0.0670 J+	0.0670	0.0670	No Exceedance
G107	UA	Compliance	07/24/2024	D15	Boron, total	mg/L	0.0092 U	0.025	0.0670	No Exceedance
G107	UA	Compliance	09/28/2023	D13	Calcium, total	mg/L	90.7	90.7	104	No Exceedance
G107	UA	Compliance	02/01/2024	D14	Calcium, total	mg/L	76.0	76.0	104	No Exceedance
G107	UA	Compliance	07/24/2024	D15	Calcium, total	mg/L	87.1	87.1	103	No Exceedance
G107	UA	Compliance	09/28/2023	D13	Chloride, total	mg/L	77.0	77.0	140	No Exceedance
G107	UA	Compliance	02/01/2024	D14	Chloride, total	mg/L	88.0	88.0	139	No Exceedance
G107	UA	Compliance	07/24/2024	D15	Chloride, total	mg/L	85.0	85.0	138	No Exceedance
G107	UA	Compliance	09/28/2023	D13	Fluoride, total	mg/L	0.220	0.220	0.246	No Exceedance
G107	UA	Compliance	02/01/2024	D14	Fluoride, total	mg/L	0.180	0.180	0.244	No Exceedance
G107	UA	Compliance	07/24/2024	D15	Fluoride, total	mg/L	0.200 J+	0.200	0.244	No Exceedance
G107	UA	Compliance	09/28/2023	D13	pH (field)	SU	6.4	6.4	6.2/6.9	No Exceedance
G107	UA	Compliance	02/01/2024	D14	pH (field)	SU	6.3	6.3	6.2/6.9	No Exceedance
G107	UA	Compliance	07/24/2024	D15	pH (field)	SU	6.6	6.6	6.2/6.9	No Exceedance
G107	UA	Compliance	09/28/2023	D13	Sulfate, total	mg/L	26.0	26.0	131	No Exceedance
G107	UA	Compliance	02/01/2024	D14	Sulfate, total	mg/L	39.0	39.0	129	No Exceedance
G107	UA	Compliance	07/24/2024	D15	Sulfate, total	mg/L	37.0	37.0	127	No Exceedance
G107	UA	Compliance	09/28/2023	D13	Total Dissolved Solids	mg/L	505	505	731	No Exceedance
G107	UA	Compliance	02/01/2024	D14	Total Dissolved Solids	mg/L	450	450	725	No Exceedance
G107	UA	Compliance	07/24/2024	D15	Total Dissolved Solids	mg/L	574	574	722	No Exceedance
G109	UA	Compliance	09/26/2023	D13	Boron, total	mg/L	0.0251	0.0251	0.0315	No Exceedance
G109	UA	Compliance	01/31/2024	D14	Boron, total	mg/L	0.03 UJ	0.025	0.0315	No Exceedance
G109	UA	Compliance	07/23/2024	D15	Boron, total	mg/L	0.018 J	0.025	0.0315	No Exceedance
G109	UA	Compliance	09/26/2023	D13	Calcium, total	mg/L	17.4	17.4	46.3	No Exceedance
G109	UA	Compliance	01/31/2024	D14	Calcium, total	mg/L	15.2	15.2	45.4	No Exceedance
G109	UA	Compliance	07/23/2024	D15	Calcium, total	mg/L	17.8	17.8	44.3	No Exceedance
G109	UA	Compliance	09/26/2023	D13	Chloride, total	mg/L	10.0	10.0	23.5	No Exceedance
G109	UA	Compliance	01/31/2024	D14	Chloride, total	mg/L	12.0	12.0	23.1	No Exceedance

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

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
G109	UA	Compliance	07/23/2024	D15	Chloride, total	mg/L	8.00	8.00	22.7	No Exceedance
G109	UA	Compliance	09/26/2023	D13	Fluoride, total	mg/L	0.210	0.210	0.360	No Exceedance
G109	UA	Compliance	01/31/2024	D14	Fluoride, total	mg/L	0.170	0.170	0.356	No Exceedance
G109	UA	Compliance	07/23/2024	D15	Fluoride, total	mg/L	0.190 J+	0.190	0.352	No Exceedance
G109	UA	Compliance	09/26/2023	D13	pH (field)	SU	6.4	6.4	6.1/7.0	No Exceedance
G109	UA	Compliance	01/31/2024	D14	pH (field)	SU	6.3	6.3	6.1/6.9	No Exceedance
G109	UA	Compliance	07/23/2024	D15	pH (field)	SU	6.5	6.5	6.1/6.9	No Exceedance
G109	UA	Compliance	09/26/2023	D13	Sulfate, total	mg/L	23.0	23.0	85.3	No Exceedance
G109	UA	Compliance	01/31/2024	D14	Sulfate, total	mg/L	19.0	19.0	84.3	No Exceedance
G109	UA	Compliance	07/23/2024	D15	Sulfate, total	mg/L	24.0	24.0	83.1	No Exceedance
G109	UA	Compliance	09/26/2023	D13	Total Dissolved Solids	mg/L	204	204	457	No Exceedance
G109	UA	Compliance	01/31/2024	D14	Total Dissolved Solids	mg/L	172	172	450	No Exceedance
G109	UA	Compliance	07/23/2024	D15	Total Dissolved Solids	mg/L	196	196	443	No Exceedance
G111	UA	Compliance	09/26/2023	D13	Boron, total	mg/L	0.0092 U	0.025	0.0470	No Exceedance
G111	UA	Compliance	01/31/2024	D14	Boron, total	mg/L	0.03 UJ	0.025	0.0470	No Exceedance
G111	UA	Compliance	07/24/2024	D15	Boron, total	mg/L	0.018 J	0.025	0.0470	No Exceedance
G111	UA	Compliance	09/26/2023	D13	Calcium, total	mg/L	13.0	13.0	25.6	No Exceedance
G111	UA	Compliance	01/31/2024	D14	Calcium, total	mg/L	13.0	13.0	25.4	No Exceedance
G111	UA	Compliance	07/24/2024	D15	Calcium, total	mg/L	14.2	14.2	25.2	No Exceedance
G111	UA	Compliance	09/26/2023	D13	Chloride, total	mg/L	9.00	9.00	19.2	No Exceedance
G111	UA	Compliance	01/31/2024	D14	Chloride, total	mg/L	8.00 J+	8.00	18.9	No Exceedance
G111	UA	Compliance	07/24/2024	D15	Chloride, total	mg/L	8.00	8.00	18.6	No Exceedance
G111	UA	Compliance	09/26/2023	D13	Fluoride, total	mg/L	0.300	0.300	0.373	No Exceedance
G111	UA	Compliance	01/31/2024	D14	Fluoride, total	mg/L	0.250	0.250	0.371	No Exceedance
G111	UA	Compliance	07/24/2024	D15	Fluoride, total	mg/L	0.280 J+	0.280	0.368	No Exceedance
G111	UA	Compliance	09/26/2023	D13	pH (field)	SU	6.6	6.6	5.9/6.8	No Exceedance
G111	UA	Compliance	01/31/2024	D14	pH (field)	SU	6.6	6.6	5.9/6.8	No Exceedance
G111	UA	Compliance	07/24/2024	D15	pH (field)	SU	6.1	6.1	5.9/6.8	No Exceedance
G111	UA	Compliance	09/26/2023	D13	Sulfate, total	mg/L	16.0	16.0	49.3	No Exceedance
G111	UA	Compliance	01/31/2024	D14	Sulfate, total	mg/L	16.0	16.0	48.8	No Exceedance
G111	UA	Compliance	07/24/2024	D15	Sulfate, total	mg/L	20.0	20.0	48.1	No Exceedance
G111	UA	Compliance	09/26/2023	D13	Total Dissolved Solids	mg/L	214	214	351	No Exceedance
G111	UA	Compliance	01/31/2024	D14	Total Dissolved Solids	mg/L	238	238	348	No Exceedance
G111	UA	Compliance	07/24/2024	D15	Total Dissolved Solids	mg/L	242	242	346	No Exceedance

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

Notes:
-- = not applicable
Comparison Value is different from the Result when the Result is below the Reporting Limit (RL). The Result will not be used in statistical calculations due to the inherent uncertainty in results that are below the RL. Half of the RL will be substituted for these data. See the *Multi-Site Statistical Analysis Plan* (Ramboll, 2022a) for more information.
Event IDs:
D13 = Quarter 3, 2023 Detection Monitoring sampling event
D14 = Quarter 1, 2024 Detection Monitoring sampling event
D15 = Quarter 3, 2024 Detection Monitoring sampling event
HSU = hydrostratigraphic unit:
UA = Uppermost Aquifer
ID = identification
mg/L = milligrams per liter
Result Code (if applicable):
NR[1] = Parameter not analyzed.
NS[1] = Well has been, or will be, abandoned; therefore, a sample was not collected.
NS[2] = Well either needs or was undergoing maintenance; therefore, a sample was not collected.
NS[3] = The location was not accessible; therefore, a sample was not collected.
NS[4] = The location could not be found; therefore, a sample was not collected.
NS[5] = The location was damaged; therefore, a sample was not collected.
NS[6] = Sampling pump could not yield a sample.
NS[7] = Well was either dry or purged dry and did not recover sufficiently to yield adequate volume for a sample.
NS[8] = A sample was not collected.
PM[1] = Parameter not analyzed as the well purged dry during sample collection and did not sufficiently recover to yield adequate sample volume for analysis.
Result qualifiers as defined in the United States Environmental Protection Agency's *National Functional Guidelines for Inorganic Superfund Methods Data Review*, EPA 542-R-20-006. November 2020.:
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+ = The result is an estimated quantity, but the result may be biased high.
U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.
UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
Statistically Significant Increase (SSI) Type:
No Exceedance: No exceedance of the background.
SU = Standard Units

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TABLE 3
STATISTICAL BACKGROUND VALUES
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
LANDFILL
JOPPA, IL

Parameter	Well ID	Event ID	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Background Value (LPL/UPL)
Boron (mg/L)	G105	D14	12/22/2015 - 01/31/2024	22	100	DQR	DQR
Boron (mg/L)	G105	D15	12/22/2015 - 07/24/2024	23	100	DQR	DQR
Boron (mg/L)	G107	D14	12/22/2015 - 02/01/2024	22	59	Non-Parametric UPL	0.0670
Boron (mg/L)	G107	D15	12/22/2015 - 07/24/2024	23	61	Non-Parametric UPL	0.0670
Boron (mg/L)	G109	D14	12/22/2015 - 01/31/2024	22	73	Non-Parametric UPL	0.0315
Boron (mg/L)	G109	D15	12/22/2015 - 07/23/2024	23	74	Non-Parametric UPL	0.0315
Boron (mg/L)	G111	D14	12/22/2015 - 01/31/2024	22	64	Non-Parametric UPL	0.0470
Boron (mg/L)	G111	D15	12/22/2015 - 07/24/2024	23	65	Non-Parametric UPL	0.0470
Calcium (mg/L)	G105	D14	12/22/2015 - 01/31/2024	22	0	Non-Parametric UPL	45.3
Calcium (mg/L)	G105	D15	12/22/2015 - 07/24/2024	23	0	Non-Parametric UPL	45.3
Calcium (mg/L)	G107	D14	12/22/2015 - 02/01/2024	22	0	Parametric UPL	104
Calcium (mg/L)	G107	D15	12/22/2015 - 07/24/2024	23	0	Parametric UPL	103
Calcium (mg/L)	G109	D14	12/22/2015 - 01/31/2024	22	0	Parametric UPL (log-transformed)	45.4
Calcium (mg/L)	G109	D15	12/22/2015 - 07/23/2024	23	0	Parametric UPL (log-transformed)	44.3
Calcium (mg/L)	G111	D14	12/22/2015 - 01/31/2024	22	0	Parametric UPL	25.4
Calcium (mg/L)	G111	D15	12/22/2015 - 07/24/2024	23	0	Parametric UPL	25.2
Chloride (mg/L)	G105	D14	12/22/2015 - 01/31/2024	22	0	Parametric UPL	58.2
Chloride (mg/L)	G105	D15	12/22/2015 - 07/24/2024	23	0	Parametric UPL	61.0
Chloride (mg/L)	G107	D14	12/22/2015 - 02/01/2024	22	0	Parametric UPL	139
Chloride (mg/L)	G107	D15	12/22/2015 - 07/24/2024	23	0	Parametric UPL	138
Chloride (mg/L)	G109	D14	12/22/2015 - 01/31/2024	23	0	Parametric UPL (log-transformed)	23.1
Chloride (mg/L)	G109	D15	12/22/2015 - 07/23/2024	24	0	Parametric UPL (log-transformed)	22.7
Chloride (mg/L)	G111	D14	12/22/2015 - 01/31/2024	22	9	Parametric UPL	18.9
Chloride (mg/L)	G111	D15	12/22/2015 - 07/24/2024	23	9	Parametric UPL	18.6
Fluoride (mg/L)	G105	D14	12/22/2015 - 01/31/2024	22	0	Non-Parametric UPL	0.290
Fluoride (mg/L)	G105	D15	12/22/2015 - 07/24/2024	23	0	Non-Parametric UPL	0.290
Fluoride (mg/L)	G107	D14	12/22/2015 - 02/01/2024	22	0	Parametric UPL	0.244
Fluoride (mg/L)	G107	D15	12/22/2015 - 07/24/2024	23	0	Parametric UPL	0.244
Fluoride (mg/L)	G109	D14	12/22/2015 - 01/31/2024	23	0	Parametric UPL	0.356
Fluoride (mg/L)	G109	D15	12/22/2015 - 07/23/2024	24	0	Parametric UPL	0.352

TABLE 3
STATISTICAL BACKGROUND VALUES
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
JOPPA POWER PLANT
LANDFILL
JOPPA, IL

Parameter	Well ID	Event ID	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Background Value (LPL/UPL)
Fluoride (mg/L)	G111	D14	12/22/2015 - 01/31/2024	22	0	Parametric UPL	0.371
Fluoride (mg/L)	G111	D15	12/22/2015 - 07/24/2024	23	0	Parametric UPL	0.368
pH (field) (SU)	G105	D14	12/22/2015 - 01/31/2024	22	0	Parametric LPL/UPL	5.9/6.6
pH (field) (SU)	G105	D15	12/22/2015 - 07/24/2024	23	0	Parametric LPL/UPL	5.9/6.6
pH (field) (SU)	G107	D14	12/22/2015 - 02/01/2024	22	0	Parametric LPL/UPL	6.2/6.9
pH (field) (SU)	G107	D15	12/22/2015 - 07/24/2024	23	0	Parametric LPL/UPL	6.2/6.9
pH (field) (SU)	G109	D14	12/22/2015 - 01/31/2024	23	0	Parametric LPL/UPL	6.1/6.9
pH (field) (SU)	G109	D15	12/22/2015 - 07/23/2024	24	0	Parametric LPL/UPL	6.1/6.9
pH (field) (SU)	G111	D14	12/22/2015 - 01/31/2024	22	0	Non-Parametric LPL/UPL	5.9/6.8
pH (field) (SU)	G111	D15	12/22/2015 - 07/24/2024	23	0	Non-Parametric LPL/UPL	5.9/6.8
Sulfate (mg/L)	G105	D14	12/22/2015 - 01/31/2024	22	0	Non-Parametric UPL	19.0
Sulfate (mg/L)	G105	D15	12/22/2015 - 07/24/2024	23	0	Non-Parametric UPL	19.0
Sulfate (mg/L)	G107	D14	12/22/2015 - 02/01/2024	22	0	Parametric UPL	129
Sulfate (mg/L)	G107	D15	12/22/2015 - 07/24/2024	23	0	Parametric UPL	127
Sulfate (mg/L)	G109	D14	12/22/2015 - 01/31/2024	23	0	Parametric UPL	84.3
Sulfate (mg/L)	G109	D15	12/22/2015 - 07/23/2024	24	0	Parametric UPL	83.1
Sulfate (mg/L)	G111	D14	12/22/2015 - 01/31/2024	22	5	Parametric UPL	48.8
Sulfate (mg/L)	G111	D15	12/22/2015 - 07/24/2024	23	4	Parametric UPL	48.1
Total Dissolved Solids (mg/L)	G105	D14	12/22/2015 - 01/31/2024	22	0	Non-Parametric UPL	268
Total Dissolved Solids (mg/L)	G105	D15	12/22/2015 - 07/24/2024	23	0	Non-Parametric UPL	278
Total Dissolved Solids (mg/L)	G107	D14	12/22/2015 - 02/01/2024	22	0	Parametric UPL	725
Total Dissolved Solids (mg/L)	G107	D15	12/22/2015 - 07/24/2024	23	0	Parametric UPL	722
Total Dissolved Solids (mg/L)	G109	D14	12/22/2015 - 01/31/2024	22	5	Parametric UPL	450
Total Dissolved Solids (mg/L)	G109	D15	12/22/2015 - 07/23/2024	23	4	Parametric UPL	443
Total Dissolved Solids (mg/L)	G111	D14	12/22/2015 - 01/31/2024	22	0	Parametric UPL	348
Total Dissolved Solids (mg/L)	G111	D15	12/22/2015 - 07/24/2024	23	0	Parametric UPL	346

Notes:
DQR = Double Quantification Rule
Event IDs:
D14 = Quarter 1, 2024 Detection Monitoring sampling event
D15 = Quarter 3, 2024 Detection Monitoring sampling event
ID = identification
LPL = lower prediction limit (applicable for pH only)
mg/L = milligrams per liter
SU = standard units
UPL = upper prediction limit

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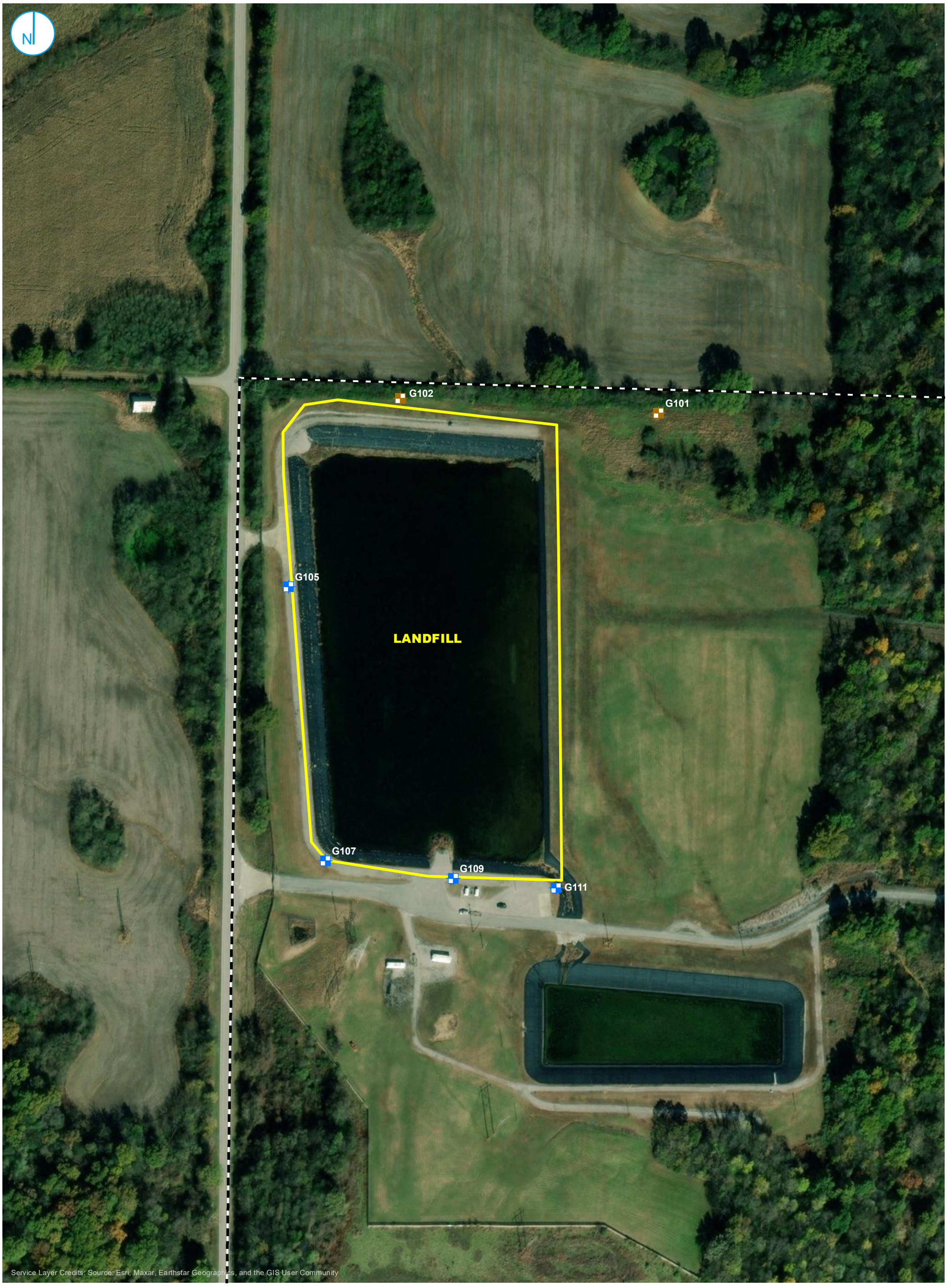
FIGURES



COMPLIANCE MONITORING WELL
BACKGROUND MONITORING WELL
REGULATED UNIT (SUBJECT UNIT)
PROPERTY BOUNDARY

0 100 200 Feet

MONITORING WELL LOCATION MAP

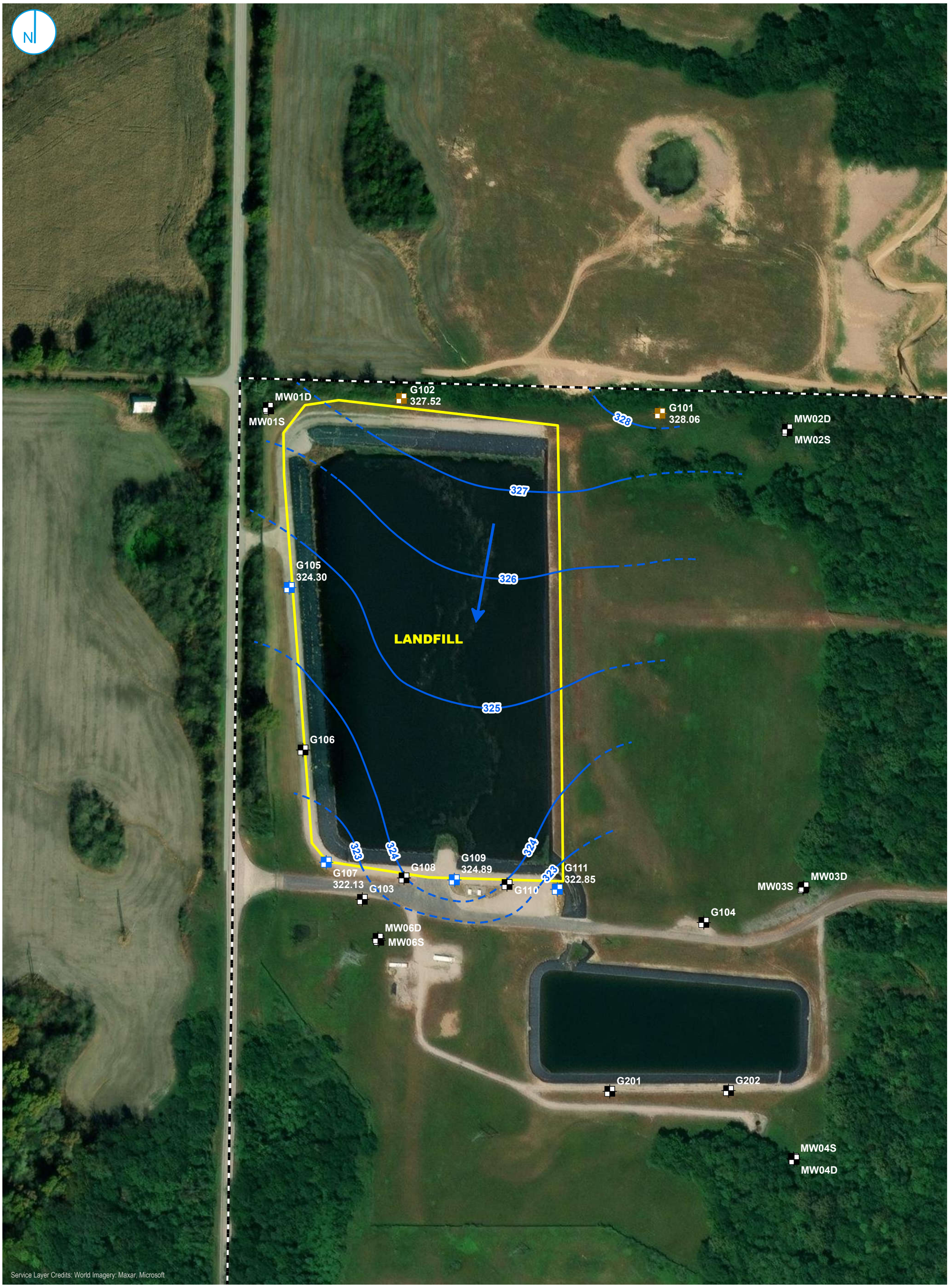
2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT LANDFILL

JOPPA POWER PLANT
JOPPA, ILLINOIS

FIGURE 1

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL



- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- MONITORING WELL
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY
- GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION

0 100 200 Feet

NOTES
1. ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

POTENTIOMETRIC SURFACE MAP JANUARY 29, 2024

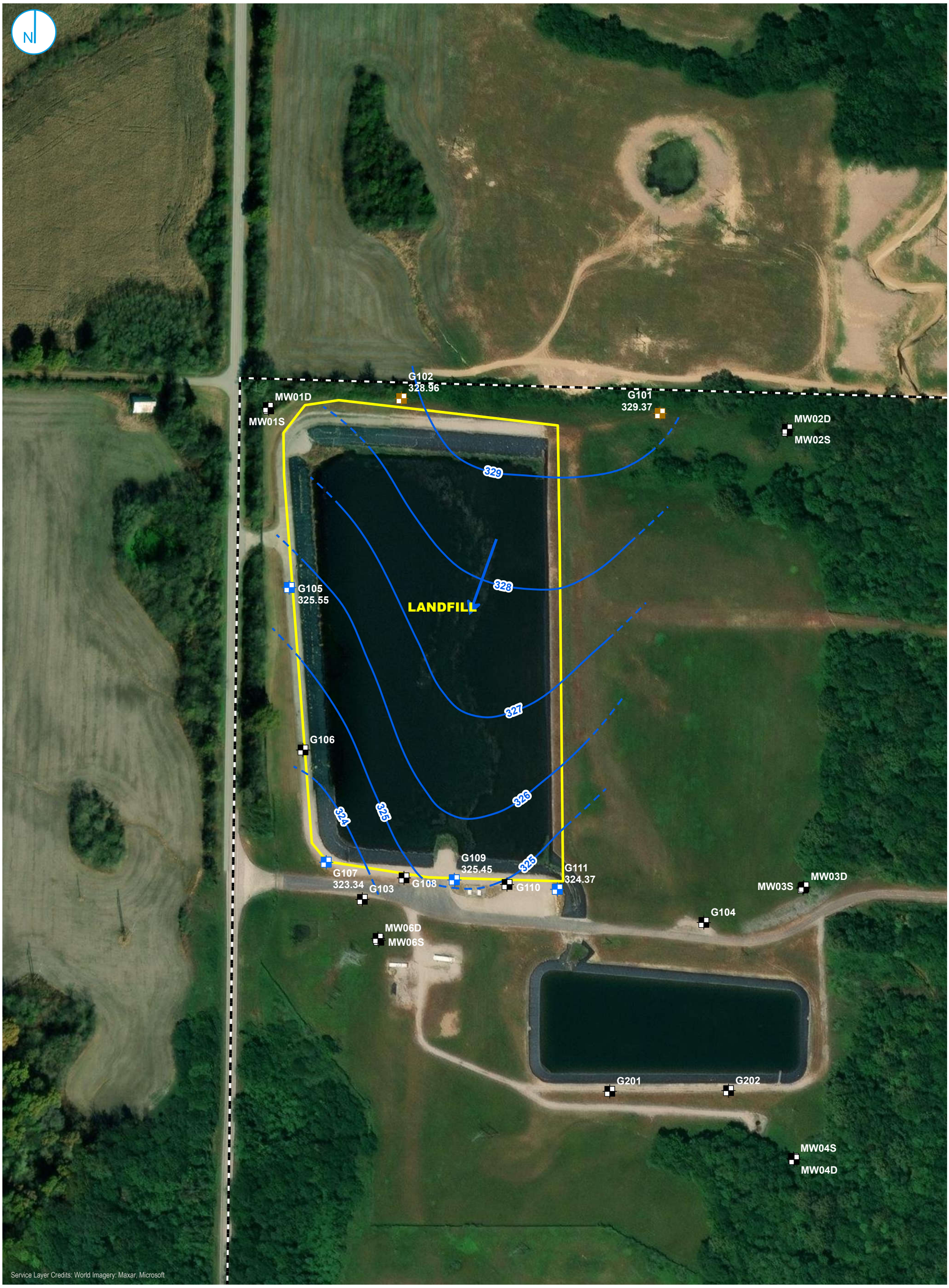
2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT LANDFILL

JOPPA POWER PLANT
JOPPA, ILLINOIS

FIGURE 2

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL



- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- MONITORING WELL
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY
- GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION

0 100 200 Feet

NOTES
1. ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

POTENTIOMETRIC SURFACE MAP JULY 22, 2024

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT LANDFILL

JOPPA POWER PLANT
JOPPA, ILLINOIS

FIGURE 3

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL

APPENDICES

APPENDIX A
LABORATORY REPORTS AND FIELD DATA SHEETS

Teklab, Inc.
Environmental Laboratory
http://www.teklabinc.com/

February 20, 2024

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

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

RE: JOP-24Q1 **WorkOrder:** 24010966

Dear Eric Bauer:

TEKLAB, INC received 9 samples for JOP_257_402 on 2/1/2024 3:40:00 PM for the analysis presented in the following report.

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

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

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

Sincerely,

Elizabeth A. Hurley

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

Report Contents

Client: Ramboll
Work Order: 24010966
Client Project: JOP-24Q1
Report Date: 20-Feb-24

This reporting package includes the following:

Definitions

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

Abbr	Definition
*	Analytes on report marked with an asterisk are not NELAP accredited
CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
CRQL	A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
DNI	Did not ignite
DUP	Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample is a sample matrix, free from the analytes of interest,spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MBLK	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	"The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
NC	Data is not acceptable for compliance purposes
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TIC	Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
TNTC	Too numerous to count (> 200 CFU)

Definitions

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

Qualifiers

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

Case Narrative

Client: Ramboll
Work Order: 24010966
Client Project: JOP-24Q1
Report Date: 20-Feb-24

Cooler Receipt Temp: 1.7 °C

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

YSG03 date/time of collection per SAR depth forms. Equipment Blanks 2 and 3 were not required due tosampling methods employed. EAH 2/2/24

Per Eric Bauer's request, only JOP_257_402 data is included in this report. EAH 2/20/24

Locations

Collinsville

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

Springfield

Address 3920 Pintail Dr
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Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
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

Chicago

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

Accreditations

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

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

Teklab, Inc. Environmental Laboratory

Laboratory Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

Lab ID: 24010966-031 **Client Sample ID:** G101_LF

Matrix: GROUNDWATER **Collection Date:** 01/31/2024 15:11

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**47.10**	ft	1	01/31/2024 15:11	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**55**	NTU	1	01/31/2024 15:11	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**154**	mV	1	01/31/2024 15:11	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**259**	µS/cm	1	01/31/2024 15:11	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**14.6**	°C	1	01/31/2024 15:11	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**6.77**	mg/L	1	01/31/2024 15:11	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		**6.47**		1	01/31/2024 15:11	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0	0		**107**	mg/L	1	02/01/2024 11:08	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO3)	NELAP	0	0		**0**	mg/L	1	02/01/2024 11:08	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		**220**	mg/L	2.5	02/02/2024 11:10	R342621
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**40**	mg/L	1	02/02/2024 15:39	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.29**	mg/L	1	02/02/2024 12:45	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		**6**	mg/L	1	02/02/2024 15:39	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		**11.3**	mg/L	1	02/02/2024 10:02	218159
Magnesium	NELAP	0.0055	0.0500		**4.72**	mg/L	1	02/02/2024 10:02	218159
Potassium	NELAP	0.0400	0.100		**0.663**	mg/L	1	02/02/2024 10:02	218159
Sodium	NELAP	0.0180	0.0500		**54.5**	mg/L	1	02/02/2024 10:02	218159
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Boron	NELAP	0.0092	0.025	J	**0.020**	mg/L	5	02/06/2024 20:16	218159

Teklab, Inc. Environmental Laboratory

Laboratory Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

Lab ID: 24010966-032 **Client Sample ID:** G102

Matrix: GROUNDWATER **Collection Date:** 01/31/2024 14:23

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**59.63**	ft	1	01/31/2024 14:23	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**10**	NTU	1	01/31/2024 14:23	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**158**	mV	1	01/31/2024 14:23	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**245**	µS/cm	1	01/31/2024 14:23	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**15.3**	°C	1	01/31/2024 14:23	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**7.64**	mg/L	1	01/31/2024 14:23	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		**6.27**		1	01/31/2024 14:23	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0	0		**105**	mg/L	1	02/01/2024 11:13	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO3)	NELAP	0	0		**0**	mg/L	1	02/01/2024 11:13	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**202**	mg/L	1	02/02/2024 11:11	R342621
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**29**	mg/L	1	02/02/2024 15:47	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.17**	mg/L	1	02/02/2024 12:47	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		**4**	mg/L	1	02/02/2024 15:47	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		**8.72**	mg/L	1	02/02/2024 10:03	218159
Magnesium	NELAP	0.0055	0.0500		**3.35**	mg/L	1	02/02/2024 10:03	218159
Potassium	NELAP	0.0400	0.100		**0.436**	mg/L	1	02/02/2024 10:03	218159
Sodium	NELAP	0.0180	0.0500		**50.0**	mg/L	1	02/02/2024 10:03	218159
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Boron	NELAP	0.0092	0.025	J	**0.013**	mg/L	5	02/06/2024 20:22	218159

Teklab, Inc. Environmental Laboratory

Laboratory Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

Lab ID: 24010966-033 **Client Sample ID:** G105

Matrix: GROUNDWATER **Collection Date:** 01/31/2024 13:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**56.19**	ft	1	01/31/2024 13:55	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**8.9**	NTU	1	01/31/2024 13:55	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**165**	mV	1	01/31/2024 13:55	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**322**	µS/cm	1	01/31/2024 13:55	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**15.9**	°C	1	01/31/2024 13:55	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**7.88**	mg/L	1	01/31/2024 13:55	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		**6.05**		1	01/31/2024 13:55	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0	0		**113**	mg/L	1	02/01/2024 11:17	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO3)	NELAP	0	0		**0**	mg/L	1	02/01/2024 11:17	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**228**	mg/L	1	02/02/2024 11:11	R342621
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**13**	mg/L	1	02/02/2024 16:11	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.14**	mg/L	1	02/02/2024 12:48	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		**38**	mg/L	1	02/02/2024 16:11	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		**24.0**	mg/L	1	02/02/2024 11:09	218159
Magnesium	NELAP	0.0055	0.0500		**9.16**	mg/L	1	02/02/2024 11:09	218159
Potassium	NELAP	0.0400	0.100		**0.355**	mg/L	1	02/02/2024 11:09	218159
Sodium	NELAP	0.0180	0.0500		**42.5**	mg/L	1	02/02/2024 11:09	218159
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Boron	NELAP	0.0092	0.025	J	**0.014**	mg/L	5	02/06/2024 20:27	218159

Laboratory Results

Teklab, Inc.
Environmental Laboratory
http://www.teklabinc.com/

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

Lab ID: 24010966-034 **Client Sample ID:** G107

Matrix: GROUNDWATER **Collection Date:** 02/01/2024 9:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**55.20**	ft	1	02/01/2024 9:15	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**29**	NTU	1	02/01/2024 9:15	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**165**	mV	1	02/01/2024 9:15	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**661**	µS/cm	1	02/01/2024 9:15	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**14.8**	°C	1	02/01/2024 9:15	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**3.12**	mg/L	1	02/01/2024 9:15	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		**6.35**		1	02/01/2024 9:15	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0	0		**255**	mg/L	1	02/02/2024 13:14	R342573
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO3)	NELAP	0	0		**0**	mg/L	1	02/02/2024 13:14	R342573
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		**450**	mg/L	2.5	02/02/2024 12:22	R342621
SW-846 9036 (TOTAL)									
Sulfate	NELAP	12	20		**39**	mg/L	2	02/05/2024 13:33	R342640
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.18**	mg/L	1	02/02/2024 13:34	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	8		**88**	mg/L	2	02/05/2024 13:33	R342647
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		**76.0**	mg/L	1	02/05/2024 9:00	218215
Magnesium	NELAP	0.0055	0.0500		**19.7**	mg/L	1	02/05/2024 9:00	218215
Potassium	NELAP	0.0400	0.100		**2.78**	mg/L	1	02/05/2024 9:00	218215
Sodium	NELAP	0.0180	0.0500		**62.0**	mg/L	1	02/05/2024 9:00	218215
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Boron	NELAP	0.0092	0.0250		**0.0670**	mg/L	5	02/06/2024 13:30	218215

Teklab, Inc. Environmental Laboratory

Laboratory Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

Lab ID: 24010966-035 **Client Sample ID:** G109

Matrix: GROUNDWATER **Collection Date:** 01/31/2024 13:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**52.78**	ft	1	01/31/2024 13:25	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**12**	NTU	1	01/31/2024 13:25	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**150**	mV	1	01/31/2024 13:25	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**222**	µS/cm	1	01/31/2024 13:25	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**16.3**	°C	1	01/31/2024 13:25	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**5.83**	mg/L	1	01/31/2024 13:25	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		**6.35**		1	01/31/2024 13:25	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0	0		**88**	mg/L	1	02/01/2024 11:21	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO3)	NELAP	0	0		**0**	mg/L	1	02/01/2024 11:21	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**172**	mg/L	1	02/02/2024 11:22	R342621
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**19**	mg/L	1	02/05/2024 10:59	R342640
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.17**	mg/L	1	02/02/2024 12:50	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		**12**	mg/L	1	02/05/2024 10:59	R342647
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		**15.2**	mg/L	1	02/02/2024 11:10	218159
Magnesium	NELAP	0.0055	0.0500		**4.55**	mg/L	1	02/02/2024 11:10	218159
Potassium	NELAP	0.0400	0.100		**2.47**	mg/L	1	02/02/2024 11:10	218159
Sodium	NELAP	0.0180	0.0500		**32.5**	mg/L	1	02/02/2024 11:10	218159
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Boron	NELAP	0.0092	0.025	J	**0.017**	mg/L	5	02/06/2024 20:33	218159

Teklab, Inc. Environmental Laboratory

Laboratory Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

Lab ID: 24010966-036 **Client Sample ID:** G111_LF

Matrix: GROUNDWATER **Collection Date:** 01/31/2024 12:59

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**50.41**	ft	1	01/31/2024 12:59	R342623
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**7.6**	NTU	1	01/31/2024 12:59	R342623
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**140**	mV	1	01/31/2024 12:59	R342623
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**296**	µS/cm	1	01/31/2024 12:59	R342623
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**16.3**	°C	1	01/31/2024 12:59	R342623
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**4.86**	mg/L	1	01/31/2024 12:59	R342623
SW-846 9040B FIELD									
pH	*	0	1.00		**6.62**		1	01/31/2024 12:59	R342623
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0	0		**156**	mg/L	1	02/01/2024 11:25	R342461
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO3)	NELAP	0	0		**0**	mg/L	1	02/01/2024 11:25	R342461
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**238**	mg/L	1	02/02/2024 11:22	R342621
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**16**	mg/L	1	02/02/2024 16:35	R342591
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.25**	mg/L	1	02/02/2024 12:52	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		**8**	mg/L	1	02/02/2024 16:35	R342603
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		**13.0**	mg/L	1	02/02/2024 12:05	218159
Magnesium	NELAP	0.0055	0.0500		**4.19**	mg/L	1	02/02/2024 12:05	218159
Potassium	NELAP	0.0400	0.100		**1.64**	mg/L	1	02/02/2024 12:05	218159
Sodium	NELAP	0.0180	0.0500		**61.3**	mg/L	1	02/02/2024 12:05	218159
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Boron	NELAP	0.0092	0.025	J	**0.014**	mg/L	5	02/06/2024 20:39	218159

Laboratory Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

Lab ID: 24010966-041 **Client Sample ID:** YSG03

Matrix: GROUNDWATER **Collection Date:** 01/29/2024 11:52

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

Laboratory Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

Lab ID: 24010966-042 **Client Sample ID:** Field Blank

Matrix: AQUEOUS **Collection Date:** 02/01/2024 11:42

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0	0		**0**	mg/L	1	02/02/2024 13:19	R342573
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO3)	NELAP	0	0		**0**	mg/L	1	02/02/2024 13:19	R342573
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**< 20**	mg/L	1	02/02/2024 12:22	R342621
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**< 10**	mg/L	1	02/05/2024 13:41	R342640
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**< 0.10**	mg/L	1	02/02/2024 12:56	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		**< 4**	mg/L	1	02/05/2024 13:41	R342647
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		**< 0.100**	mg/L	1	02/05/2024 9:01	218215
Magnesium	NELAP	0.0055	0.0500		**< 0.0500**	mg/L	1	02/05/2024 9:01	218215
Potassium	NELAP	0.0400	0.100		**< 0.100**	mg/L	1	02/05/2024 9:01	218215
Sodium	NELAP	0.018	0.050	J	**0.022**	mg/L	1	02/05/2024 9:01	218215
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Boron	NELAP	0.0092	0.025	J	**0.014**	mg/L	5	02/06/2024 13:36	218215

Laboratory Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

Lab ID: 24010966-045 **Client Sample ID:** Equipment Blank 1

Matrix: AQUEOUS **Collection Date:** 02/01/2024 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2320 B (TOTAL) 1997, 2011									
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0	0		**1**	mg/L	1	02/02/2024 13:27	R342573
STANDARD METHODS 2320 B 1997, 2011									
Alkalinity, Carbonate (as CaCO3)	NELAP	0	0		**0**	mg/L	1	02/02/2024 13:27	R342573
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**< 20**	mg/L	1	02/02/2024 12:21	R342621
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**< 10**	mg/L	1	02/05/2024 13:52	R342640
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**< 0.10**	mg/L	1	02/02/2024 13:12	R342565
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4	J	**1**	mg/L	1	02/05/2024 13:52	R342647
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.035	0.10	J	**0.057**	mg/L	1	02/05/2024 9:03	218215
Magnesium	NELAP	0.0055	0.050	J	**0.015**	mg/L	1	02/05/2024 9:03	218215
Potassium	NELAP	0.0400	0.100		**< 0.100**	mg/L	1	02/05/2024 9:03	218215
Sodium	NELAP	0.018	0.050	J	**0.034**	mg/L	1	02/05/2024 9:03	218215
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Boron	NELAP	0.0092	0.025	J	**0.013**	mg/L	5	02/06/2024 15:07	218215

Teklab, Inc.
Environmental Laboratory

Sample Summary

Client: Ramboll
Client Project: JOP-24Q1

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

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
24010966-031	G101_LF	Groundwater	2	01/31/2024 15:11
24010966-032	G102	Groundwater	2	01/31/2024 14:23
24010966-033	G105	Groundwater	2	01/31/2024 13:55
24010966-034	G107	Groundwater	2	02/01/2024 9:15
24010966-035	G109	Groundwater	2	01/31/2024 13:25
24010966-036	G111_LF	Groundwater	2	01/31/2024 12:59
24010966-041	YSG03	Groundwater	1	01/29/2024 11:52
24010966-042	Field Blank	Aqueous	2	02/01/2024 11:42
24010966-045	Equipment Blank 1	Aqueous	2	02/01/2024 12:00

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

STANDARD METHODS 2510 B FIELD

Batch R342623 **SampType:** LCS Units **µS/cm**
SampID: LCS-R342623-1

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

Batch R342623 **SampType:** LCS Units **µS/cm**
SampID: LCS-R342623-2

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

Batch R342623 **SampType:** LCS Units **µS/cm**
SampID: LCS-R342623-3

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

Batch R342623 **SampType:** LCS Units **µS/cm**
SampID: LCS-R342623-4

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

Batch R342623 **SampType:** LCS Units **µS/cm**
SampID: LCS-R342623-5

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

Batch R342623 **SampType:** LCS Units **µS/cm**
SampID: LCS-R342623-6

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

SW-846 9040B FIELD

Batch R342623 **SampType:** LCS Units
SampID: LCS-R342623-1

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

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

SW-846 9040B FIELD

Batch R342623 **SampType:** LCS Units

SampID: LCS-R342623-2

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.01**	7.000	0	100.1	98.57	101.4	01/31/2024

Batch R342623 **SampType:** LCS Units

SampID: LCS-R342623-3

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.02**	7.000	0	100.3	98.57	101.4	02/01/2024

Batch R342623 **SampType:** LCS Units

SampID: LCS-R342623-4

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.08**	7.000	0	101.1	98.57	101.4	01/29/2024

Batch R342623 **SampType:** LCS Units

SampID: LCS-R342623-5

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.10**	7.000	0	101.4	98.57	101.4	01/30/2024

Batch R342623 **SampType:** LCS Units

SampID: LCS-R342623-6

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.09**	7.000	0	101.3	98.57	101.4	01/31/2024

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R342567 **SampType:** MBLK Units **mg/L**

SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	02/01/2024
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	02/01/2024

Batch R342567 **SampType:** LCS Units **mg/L**

SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**946**	1000	0	94.6	90	110	02/01/2024
Total Dissolved Solids		20		**958**	1000	0	95.8	90	110	02/01/2024

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R342567 **SampType:** DUP Units **mg/L** RPD Limit **10**
SampID: 24010966-039ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		**396**				394.0	0.51	02/01/2024

Batch R342567 **SampType:** DUP Units **mg/L** RPD Limit **10**
SampID: 24012064-004BDUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		**864**				874.0	1.15	02/01/2024

Batch R342621 **SampType:** MBLK Units **mg/L**
SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	02/02/2024
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	02/02/2024

Batch R342621 **SampType:** LCS Units **mg/L**
SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**940**	1000	0	94.0	90	110	02/02/2024
Total Dissolved Solids		20		**948**	1000	0	94.8	90	110	02/02/2024

Batch R342621 **SampType:** DUP Units **mg/L** RPD Limit **10**
SampID: 24010966-015ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		**674**				684.0	1.47	02/02/2024

Batch R342621 **SampType:** DUP Units **mg/L** RPD Limit **10**
SampID: 24010966-024ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		**210**				216.0	2.82	02/02/2024

Batch R342937 **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	J	**16**	16.00	0	100.0	-100	100	02/09/2024
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	02/09/2024
Total Dissolved Solids		20	J	**16**	16.00	0	100.0	-100	100	02/09/2024

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R342937 **SampType:** LCS Units **mg/L**
SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**952**	1000	0	95.2	90	110	02/09/2024
Total Dissolved Solids		20		**956**	1000	0	95.6	90	110	02/09/2024
Total Dissolved Solids		20		**918**	1000	0	91.8	90	110	02/09/2024

Batch R342937 **SampType:** DUP Units **mg/L** RPD Limit **10**
SampID: 24011852-012ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		**404**				410.0	1.47	02/09/2024

Batch R342937 **SampType:** DUP Units **mg/L** RPD Limit **10**
SampID: 24011852-035ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		**502**				492.0	2.01	02/09/2024

Batch R342937 **SampType:** DUP Units **mg/L** RPD Limit **10**
SampID: 24020602-010ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		50		**325**				330.0	1.53	02/09/2024

SW-846 9036 (TOTAL)

Batch R342591 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**< 10**	6.140	0	0	-100	100	02/02/2024

Batch R342591 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**19**	20.00	0	96.3	90	110	02/02/2024

Batch R342591 **SampType:** MS Units **mg/L**
SampID: 24010966-033AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**30**	20.00	13.20	86.2	85	115	02/02/2024

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

SW-846 9036 (TOTAL)

Batch R342591 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24010966-033AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		10		**33**	20.00	13.20	100.0	30.44	8.70	02/02/2024

Batch R342591 **SampType:** MS Units **mg/L**
SampID: 24012064-001BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10	S	**22**	20.00	7.570	74.7	85	115	02/02/2024

Batch R342591 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24012064-001BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		10	S	**21**	20.00	7.570	69.5	22.50	4.69	02/02/2024

Batch R342591 **SampType:** MS Units **mg/L**
SampID: 24012064-005BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		50		**230**	100.0	132.4	97.4	85	115	02/02/2024

Batch R342591 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24012064-005BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		50		**234**	100.0	132.4	101.7	229.8	1.85	02/02/2024

Batch R342591 **SampType:** MS Units **mg/L**
SampID: 24020010-001BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		50	E	**268**	100.0	160.7	107.4	85	115	02/02/2024

Batch R342591 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24020010-001BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		50	E	**252**	100.0	160.7	90.8	268.1	6.38	02/02/2024

Batch R342640 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**< 10**	6.140	0	0	-100	100	02/05/2024

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

SW-846 9036 (TOTAL)

Batch R342640 **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	02/05/2024

Batch R342640 **SampType:** MS Units **mg/L**
SampID: 24010966-038AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		1000		**4710**	2000	2765	97.2	85	115	02/05/2024

Batch R342640 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24010966-038AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		1000		**4540**	2000	2765	88.8	4709	3.62	02/05/2024

Batch R342640 **SampType:** MS Units **mg/L**
SampID: 24020055-002BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		20	E	**107**	40.00	70.83	91.4	90	110	02/05/2024

Batch R342640 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24020055-002BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		20	E	**109**	40.00	70.83	96.2	107.4	1.77	02/05/2024

Batch R342640 **SampType:** MS Units **mg/L**
SampID: 24020079-003BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		20		**75**	40.00	35.36	98.8	90	110	02/05/2024

Batch R342640 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24020079-003BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		20		**74**	40.00	35.36	97.6	74.86	0.59	02/05/2024

Batch R342640 **SampType:** MS Units **mg/L**
SampID: 24020136-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		100		**361**	200.0	181.0	89.8	85	115	02/05/2024

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

SW-846 9036 (TOTAL)

Batch R342640 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24020136-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		100		**365**	200.0	181.0	91.8	360.6	1.10	02/05/2024

Batch R342640 **SampType:** MS Units **mg/L**
SampID: 24020177-001BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		20		**98**	40.00	61.83	90.0	85	115	02/05/2024

Batch R342640 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24020177-001BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		20		**97**	40.00	61.83	89.0	97.82	0.39	02/05/2024

Batch R342640 **SampType:** MS Units **mg/L**
SampID: 24020177-007BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		20	E	**102**	40.00	66.18	88.8	85	115	02/05/2024

Batch R342640 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24020177-007BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		20	E	**103**	40.00	66.18	91.2	101.7	0.92	02/05/2024

Batch R342640 **SampType:** MS Units **mg/L**
SampID: 24020179-003BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		20	E	**101**	40.00	64.19	92.9	85	115	02/05/2024

Batch R342640 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24020179-003BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		20	E	**102**	40.00	64.19	94.8	101.3	0.76	02/05/2024

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

SW-846 9214 (TOTAL)

Batch R342565 **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	02/01/2024

Batch R342565 **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		**0.95**	1.000	0	95.4	90	110	02/01/2024

Batch R342565 **SampType:** MS Units **mg/L**
SampID: 24010118-009AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**1.96**	2.000	0.07300	94.5	75	125	02/02/2024

Batch R342565 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24010118-009AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.05**	2.000	0.07300	98.8	1.963	4.24	02/02/2024

Batch R342565 **SampType:** MS Units **mg/L**
SampID: 24010247-065AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		1.00		**19.0**	20.00	1.280	88.8	75	125	02/02/2024

Batch R342565 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24010247-065AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		1.00		**18.3**	20.00	1.280	85.2	19.05	3.96	02/02/2024

Batch R342565 **SampType:** MS Units **mg/L**
SampID: 24010966-006AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.37**	2.000	0.3750	99.6	75	125	02/01/2024

Batch R342565 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24010966-006AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.45**	2.000	0.3750	103.7	2.366	3.45	02/01/2024

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

SW-846 9214 (TOTAL)

Batch R342565 **SampType:** MS Units **mg/L**
SampID: 24010966-016AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.44**	2.000	0.2960	107.2	75	125	02/02/2024

Batch R342565 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24010966-016AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.40**	2.000	0.2960	105.2	2.441	1.69	02/02/2024

Batch R342565 **SampType:** MS Units **mg/L**
SampID: 24010966-020AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.31**	2.000	0.3760	96.5	75	125	02/01/2024

Batch R342565 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24010966-020AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.30**	2.000	0.3760	96.4	2.306	0.13	02/01/2024

Batch R342565 **SampType:** MS Units **mg/L**
SampID: 24010966-021AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.28**	2.000	0.2790	100.3	75	125	02/02/2024

Batch R342565 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24010966-021AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.34**	2.000	0.2790	103.2	2.285	2.46	02/02/2024

Batch R342565 **SampType:** MS Units **mg/L**
SampID: 24010966-030AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.36**	2.000	0.2690	104.6	75	125	02/02/2024

Batch R342565 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24010966-030AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.19**	2.000	0.2690	96.2	2.361	7.38	02/02/2024

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

SW-846 9214 (TOTAL)

Batch R342565 **SampType:** MS Units **mg/L**
SampID: 24010966-044AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.29**	2.000	0.2200	103.4	75	125	02/02/2024

Batch R342565 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24010966-044AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.22**	2.000	0.2200	99.8	2.289	3.24	02/02/2024

Batch R342565 **SampType:** MS Units **mg/L**
SampID: 24020010-008BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.35**	2.000	0.2920	102.9	75	125	02/02/2024

Batch R342565 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24020010-008BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.29**	2.000	0.2920	100.0	2.350	2.46	02/02/2024

SW-846 9251 (TOTAL)

Batch R342603 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**< 4**	0.5000	0	0	-100	100	02/02/2024

Batch R342603 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**20**	20.00	0	99.6	90	110	02/02/2024

Batch R342603 **SampType:** MS Units **mg/L**
SampID: 24010966-033AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4	E	**56**	20.00	38.26	89.7	85	115	02/02/2024

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

SW-846 9251 (TOTAL)

Batch R342603 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24010966-033AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4	E	**56**	20.00	38.26	90.5	56.20	0.28	02/02/2024

Batch R342603 **SampType:** MS Units **mg/L**
SampID: 24010966-038AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		40		**306**	200.0	104.4	100.8	85	115	02/02/2024

Batch R342603 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24010966-038AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		40		**304**	200.0	104.4	100.0	306.0	0.54	02/02/2024

Batch R342603 **SampType:** MS Units **mg/L**
SampID: 24012064-001BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**33**	20.00	13.95	96.4	85	115	02/02/2024

Batch R342603 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24012064-001BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**32**	20.00	13.95	91.5	33.22	2.96	02/02/2024

Batch R342603 **SampType:** MS Units **mg/L**
SampID: 24012064-005BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		20		**138**	100.0	46.41	92.0	85	115	02/02/2024

Batch R342603 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24012064-005BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		20		**140**	100.0	46.41	93.5	138.5	1.06	02/02/2024

Batch R342603 **SampType:** MS Units **mg/L**
SampID: 24020010-001BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**35**	20.00	17.48	88.0	85	115	02/02/2024

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

SW-846 9251 (TOTAL)

Batch R342603 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24020010-001BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**35**	20.00	17.48	87.4	35.07	0.34	02/02/2024

Batch R342603 **SampType:** MS Units **mg/L**
SampID: 24020055-002BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**23**	20.00	3.370	98.4	85	115	02/02/2024

Batch R342603 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24020055-002BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**23**	20.00	3.370	98.4	23.05	0.00	02/02/2024

Batch R342603 **SampType:** MS Units **mg/L**
SampID: 24020079-003BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**35**	20.00	16.07	92.6	85	115	02/02/2024

Batch R342603 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24020079-003BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**35**	20.00	16.07	95.4	34.60	1.55	02/02/2024

Batch R342647 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**< 4**	0.5000	0	0	-100	100	02/05/2024

Batch R342647 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**20**	20.00	0	100.0	90	110	02/05/2024

Batch R342647 **SampType:** MS Units **mg/L**
SampID: 24020136-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**29**	20.00	10.07	93.0	85	115	02/05/2024

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

SW-846 9251 (TOTAL)

Batch R342647 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24020136-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**29**	20.00	10.07	92.6	28.67	0.24	02/05/2024

Batch R342647 **SampType:** MS Units **mg/L**
SampID: 24020177-001BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**43**	20.00	25.62	88.6	85	115	02/05/2024

Batch R342647 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24020177-001BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**44**	20.00	25.62	89.5	43.33	0.41	02/05/2024

Batch R342647 **SampType:** MS Units **mg/L**
SampID: 24020177-007BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**27**	20.00	8.110	93.2	85	115	02/05/2024

Batch R342647 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24020177-007BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**27**	20.00	8.110	94.3	26.74	0.86	02/05/2024

Batch R342647 **SampType:** MS Units **mg/L**
SampID: 24020179-003BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**24**	20.00	4.930	94.5	85	115	02/05/2024

Batch R342647 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24020179-003BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**24**	20.00	4.930	94.6	23.83	0.13	02/05/2024

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

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

Batch 218158 **SampType:** MBLK Units **mg/L**
SampID: MBLK-218158

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

Batch 218158 **SampType:** LCS Units **mg/L**
SampID: LCS-218158

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

Batch 218158 **SampType:** MS Units **mg/L**
SampID: 24010966-003BMS

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

Batch 218158 **SampType:** MSD Units **mg/L** RPD Limit **20**
SampID: 24010966-003BMSD

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

Batch 218158 **SampType:** MS Units **mg/L**
SampID: 24010966-018BMS

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

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

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

Batch 218158 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24010966-018BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100	S	**59.8**	2.500	53.34	258.0	59.41	0.64	02/05/2024
Magnesium		0.0500	S	**18.7**	2.500	15.33	133.8	18.52	0.82	02/05/2024
Potassium		0.100		**3.96**	2.500	1.278	107.3	3.942	0.48	02/05/2024
Sodium		0.0500	S	**32.6**	2.500	28.59	162.4	32.61	0.12	02/05/2024

Batch 218159 **SampType:** MBLK Units **mg/L**

SampID: MBLK-218159

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

Batch 218159 **SampType:** LCS Units **mg/L**

SampID: LCS-218159

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		**2.49**	2.500	0	99.7	85	115	02/02/2024
Magnesium		0.0500		**2.38**	2.500	0	95.2	85	115	02/02/2024
Potassium		0.100		**2.54**	2.500	0	101.8	85	115	02/02/2024
Sodium		0.0500		**2.50**	2.500	0	99.9	85	115	02/02/2024

Batch 218159 **SampType:** MS Units **mg/L**

SampID: 24010966-027BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		**30.5**	2.500	28.31	87.6	75	125	02/02/2024
Magnesium		0.0500		**14.4**	2.500	12.12	90.5	75	125	02/02/2024
Potassium		0.100		**2.93**	2.500	0.4145	100.4	75	125	02/02/2024
Sodium		0.0500	S	**34.8**	2.500	33.03	70.8	75	125	02/02/2024

Batch 218159 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24010966-027BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100		**30.8**	2.500	28.31	100.4	30.50	1.04	02/02/2024
Magnesium		0.0500		**14.5**	2.500	12.12	96.4	14.39	1.02	02/02/2024
Potassium		0.100		**2.94**	2.500	0.4145	101.1	2.926	0.57	02/02/2024
Sodium		0.0500		**35.1**	2.500	33.03	82.0	34.80	0.80	02/02/2024

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

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

Batch 218215 **SampType:** MBLK Units **mg/L**
SampID: MBLK-218215

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

Batch 218215 **SampType:** LCS Units **mg/L**
SampID: LCS-218215

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

Batch 218215 **SampType:** MS Units **mg/L**
SampID: 24010966-011BMS

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

Batch 218215 **SampType:** MSD Units **mg/L** RPD Limit **20**
SampID: 24010966-011BMSD

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

Batch 218215 **SampType:** MS Units **mg/L**
SampID: 24010966-045BMS

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

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

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

Batch 218215 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24010966-045BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100		**2.44**	2.500	0.05690	95.1	2.422	0.54	02/05/2024
Magnesium		0.0500		**2.30**	2.500	0.01530	91.2	2.306	0.45	02/05/2024
Potassium		0.100		**2.69**	2.500	0	107.7	2.683	0.36	02/05/2024
Sodium		0.0500		**2.48**	2.500	0.03430	97.8	2.467	0.54	02/05/2024

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

Batch 218158 **SampType:** MBLK Units **mg/L**

SampID: MBLK-218158

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

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

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

Batch 218158 **SampType:** LCS Units **mg/L**

SampID: LCS-218158

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

Batch 218158 **SampType:** MS Units **mg/L**

SampID: 24010966-003BMS

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

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

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

Batch 218158 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24010966-003BMSD

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

Batch 218158 **SampType:** MS Units **mg/L**

SampID: 24010966-018BMS

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

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

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

Batch 218158 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24010966-018BMSD

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

Batch 218159 **SampType:** MBLK Units **mg/L**

SampID: MBLK-218159

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

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

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

Batch 218159 **SampType:** LCS Units **mg/L**

SampID: LCS-218159

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

Batch 218159 **SampType:** MS Units **mg/L**

SampID: 24010966-027BMS

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

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

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

Batch 218159 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24010966-027BMSD

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

Batch 218215 **SampType:** MBLK Units **mg/L**

SampID: MBLK-218215

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

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

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

Batch 218215 **SampType:** LCS Units **mg/L**

SampID: LCS-218215

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

Batch 218215 **SampType:** MS Units **mg/L**

SampID: 24010966-011BMS

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

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

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

Batch 218215 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24010966-011BMSD

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

Batch 218215 **SampType:** MS Units **mg/L**

SampID: 24010966-045BMS

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

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

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

Batch 218215 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24010966-045BMSD

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

SW-846 7470A (TOTAL)

Batch 218173 **SampType:** MBLK Units **mg/L**

SampID: MBLK-218173

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

Batch 218173 **SampType:** LCS Units **mg/L**

SampID: LCS-218173

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00488**	0.0050	0	97.7	85	115	02/02/2024

Batch 218173 **SampType:** MS Units **mg/L**

SampID: 24012106-003CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00483**	0.0050	0	96.5	75	125	02/02/2024

Batch 218173 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24012106-003CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00494**	0.0050	0	98.7	0.004827	2.24	02/02/2024

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

SW-846 7470A (TOTAL)

Batch 218175 **SampType:** MBLK Units **mg/L**
SampID: MBLK-218175

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

Batch 218175 **SampType:** LCS Units **mg/L**
SampID: LCS-218175

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00472**	0.0050	0	94.3	85	115	02/02/2024

Batch 218175 **SampType:** MS Units **mg/L**
SampID: 24010966-017BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00504**	0.0050	0	100.7	75	125	02/02/2024

Batch 218175 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24010966-017BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00481**	0.0050	0	96.3	0.005037	4.55	02/02/2024

Batch 218175 **SampType:** MS Units **mg/L**
SampID: 24010966-027BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00423**	0.0050	0	84.5	75	125	02/02/2024

Batch 218175 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24010966-027BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00484**	0.0050	0	96.8	0.004226	13.52	02/02/2024

Batch 218176 **SampType:** MBLK Units **mg/L**
SampID: MBLK-218176

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

Batch 218176 **SampType:** LCS Units **mg/L**
SampID: LCS-218176

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00477**	0.0050	0	95.4	85	115	02/02/2024

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

SW-846 7470A (TOTAL)

Batch 218176 **SampType:** MS Units **mg/L**
SampID: 24012081-001BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00506**	0.0050	0	101.2	75	125	02/02/2024

Batch 218176 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24012081-001BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00493**	0.0050	0	98.6	0.005059	2.56	02/02/2024

Batch 218217 **SampType:** MBLK Units **mg/L**
SampID: MBLK-218217

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**< 0.00020**	0.0001	0	0	-100	100	02/05/2024

Batch 218217 **SampType:** LCS Units **mg/L**
SampID: LCS-218217

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00480**	0.0050	0	96.0	85	115	02/05/2024

Batch 218217 **SampType:** MS Units **mg/L**
SampID: 24010118-002BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00493**	0.0050	0	98.6	75	125	02/05/2024

Batch 218217 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24010118-002BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00495**	0.0050	0	99.1	0.004932	0.41	02/05/2024

Batch 218217 **SampType:** MS Units **mg/L**
SampID: 24010966-012BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00471**	0.0050	0	94.1	75	125	02/05/2024

Batch 218217 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24010966-012BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00502**	0.0050	0	100.3	0.004707	6.34	02/05/2024

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24010966

Client Project: JOP-24Q1 **Report Date:** 20-Feb-24

SW-846 7470A (TOTAL)

Batch 218639 **SampType:** MBLK Units **mg/L**

SampID: MBLK-218639

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

Batch 218639 **SampType:** LCS Units **mg/L**

SampID: LCS-218639

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

Teklab, Inc.
Environmental Laboratory

Receiving Check List

Client: Ramboll
Client Project: JOP-24Q1

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

Carrier: Tracy Carroll

Received By: AMD

Completed by: Amber Dilallo
On: 01-Feb-24

Reviewed by: Ellie Hopkins
On: 02-Feb-24

Pages to follow: Chain of custody 5 Extra pages included 0

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C 1.7
Type of thermal preservation?	None ☐	Ice ☑	Blue Ice ☐	Dry Ice ☐
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Reported field parameters measured:	Field ☑	Lab ☐	NA ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐		
When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.				
Water – at least one vial per sample has zero headspace?	Yes ☐	No ☐	No VOA vials ☑	
Water - TOX containers have zero headspace?	Yes ☐	No ☐	No TOX containers ☑	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	NA ☐	
NPDES/CWA TCN interferences checked/treated in the field?	Yes ☐	No ☐	NA ☑	

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

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

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

24010966

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

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

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

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information: SAMPLE ID (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 DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	JOP-257-401	JOP-257-402	JOP-845-401	JOP-PGMP-401	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	G001D		WT		1/29/24	1312		2	1		1						X		X			24010966-001
2	G002D		WT		1/29/24	1359		2	1		1						X		X			24010966-002
3	G003		WT		1/30/24	1005		2	1		1						X		X			24010966-003
4	G005		WT		1/31/24	1212		2	1		1						X		X			24010966-004
5	G006		WT		1-30-24	1229		2	1		1						X		X			24010966-005
6	G007		WT		1-30-24	1119		2	1		1						X		X			24010966-006
7	G008		WT		1-30-24	1406		2	1		1						X		X			24010966-007
8	G009		WT					2	1		1						X		X			24010966-008
9	G010		WT		1-30-24	1507		2	1		1						X		X			24010966-009
10	G011		WT		1/30/24	1408		2	1		1						X		X			24010966-010
11	G012S		WT					2	1		1									X		24010966-011
12	G012D		WT					2	1		1									X		24010966-012
13	G013S		WT		1/31/24	1338		2	1		1									X		24010966-013
14	G013D		WT		1/31/24	1441		2	1		1									X		24010966-014
15	G016S		WT					2	1		1									X		24010966-015
16	G018S		WT		1-31-24	1151		2	1		1									X		24010966-016

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
JOP-24Q1	Tracy Carroll	1/31/24	1930	Simon DiLallo	1/31/24	1930	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
							1.7	Y	N	Y

pH ✓ 9079 GM 2/1/24

SAMPLER NAME AND SIGNATURE		
PRINT Name of SAMPLER:	Tracy Carroll	
SIGNATURE of SAMPLER:	Tracy Carroll	DATE Signed (MM/DD/YY): 1/31/24

24010966

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

Section A Required Client Information:

Company:	Vistra Corp-Joppa
Address:	2100 Portland Road
	Joppa, IL 62953
Email To:	Brian.Voelker@VistraCorp.com
Phone:	(217) 753-8911 Fax:
Requested Due Date/TAT:	10 day

Section B Required Project Information:

Report To:	Brian Voelker
Copy To:	Sam Davies: samantha.davies@vistracorp.com
	Roger Faughn - roger.faughn@vistracorp.com
Purchase Order No.:	
Project Name:	
Project Number:	2285

Section C Invoice Information:

Attention:	Brian Voelker
Company Name:	Vistra Corp
Address:	see Section A
Quote Reference:	
Project Manager:	
Profile #:	

REGULATORY AGENCY

NPDES **GROUND WATER** DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

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

SAMPLE ID (A-Z, 0-9 / , -) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	JOP-257-401	JOP-257-402	JOP-845-401	JOP-PGMP-401	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	G019S	WT		1-31-24	1001		2	1		1										X		24010966-017
2	G019D	WT		1-31-24	1030		2	1		1										X		24010966-018
3	G020S	WT		1-30-24	0939		2	1		1										X		24010966-019
4	G020D	WT		1-30-24	1000		2	1		1										X		24010966-020
5	G021S	WT		1-30-24	0909		2	1		1										X		24010966-021
6	G021D	WT		1-30-24	0844		2	1		1										X		24010966-022
7	G022S	WT		1-31-24	0830		2	1		1										X		24010966-023
8	G022D	WT		1-31-24	0851		2	1		1										X		24010966-024
9	G023S	WT		1-31-24	1110		2	1		1										X		24010966-025
10	G024S	WT		1-31-24	0927		2	1		1										X		24010966-026
11	G051D	WT		1/30/24	1112		2	1		1							X		X			24010966-027
12	G052D	WT		1/31/24	908		2	1		1							X		X			24010966-028
13	G053D	WT		1-30-24	1252		2	1		1							X		X			24010966-029
14	G054D	WT		1/31/24	1111		2	1		1							X		X			24010966-030
15	G101_LF	WT		1-31-24	1511		2	1		1								X				24010966-031
16	G102	WT		1-31-24	1423		2	1		1								X				24010966-032

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
JOP-24Q1	Tracy Carroll	1/31/24	1930	Sam Davies	1/31/24	1930	

SAMPLE CONDITIONS: Temp in °C | Y | N | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tracy Carroll

SIGNATURE of SAMPLER: Tracy Carroll DATE Signed (MM/DD/YY): 1/31/24

24010966

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

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

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

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

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

ITEM #	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test ↓	JOP-257-401	JOP-257-402	JOP-845-401	JOP-PGMP-401	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	G105	WT		1-31-24	1355		2	1		1								X				24010966-033
2	G107	WT					2	1		1								X				24010966-034
3	G109	WT		1-31-24	1325		2	1		1								X				24010966-035
4	G111_LF	WT		1-31-24	1259		2	1		1								X				24010966-036
5	XPW01_pore	WT		1/30/24	1214		2	1		1							X		X			24010966-037
6	XPW02_pore	WT		1/29/24	1451		2	1		1							X		X			24010966-038
7	XPW03_pore	WT		1/30/24	1302		2	1		1							X		X			24010966-039
8	XSG01	WT					0										X		X			24010966-040
9	YSG03	WT					0										X	X	X			24010966-041
10	Field Blank	WT					2	1		1							X	X	X	X		24010966-042
11	G052D Duplicate	WT		1/31/24	908		2	1		1							X		X			24010966-043
12	G012S Duplicate	WT					2	1		1										X		24010966-044
13	Equipment Blank 1	WT					2	1		1							X	X	X	X		24010966-045
14	Equipment Blank 2	WT					2	1		1							X	X	X	X		24010966-046
15	Equipment Blank 3	WT					2	1		1							X	X	X	X		24010966-047
16																						

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
JOP-24Q1	Tracy Correll	1/31/24	1930	Samantha Davies	1/31/24	1930	

SAMPLER NAME AND SIGNATURE					
PRINT Name of SAMPLER:	Tracy Correll				
SIGNATURE of SAMPLER:	Tracy Correll	DATE Signed (MM/DD/YY):	1/31/24		

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Y	N	

24010966

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

Section A Required Client Information:

Company:	Vistra Corp-Joppa
Address:	2100 Portland Road
	Joppa, IL 62953
Email To:	Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911	Fax:
Requested Due Date/TAT:	10 day

Section B Required Project Information:

Report To:	Brian Voelker
Copy To:	Sam Davies: samantha.davies@vistracorp.com
	Roger Faughn - roger.faughn@vistracorp.com
Purchase Order No.:	
Project Name:	
Project Number:	2285

Section C Invoice Information:

Attention:	Brian Voelker
Company Name:	Vistra Corp
Address:	see Section A
Quote Reference:	
Project Manager	
Profile #	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

SAMPLE ID
(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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: JOP-257-401	JOP-257-402	JOP-845-401	JOP-PGMP-401	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	G001D	WT					2	1		1						X		X			24010966-001
2	G002D	WT					2	1		1						X		X			24010966-002
3	G003	WT					2	1		1						X		X			24010966-003
4	G005	WT					2	1		1						X		X			24010966-004
5	G006	WT					2	1		1						X		X			24010966-005
6	G007	WT					2	1		1						X		X			24010966-006
7	G008	WT					2	1		1						X		X			24010966-007
8	G009	WT		2-1-24	1035		2	1		1						X		X			24010966-008
9	G010	WT					2	1		1						X		X			24010966-009
10	G011	WT					2	1		1						X		X			24010966-010
11	G012S	WT		2-1-24	1117		2	1		1									X		24010966-011
12	G012D	WT		2-1-24	1204		2	1		1									X		24010966-012
13	G013S	WT					2	1		1									X		24010966-013
14	G013D	WT					2	1		1									X		24010966-014
15	G016S	WT		2-1-24	1237		2	1		1									X		24010966-015
16	G018S	WT					2	1		1									X		24010966-016

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
JOP-24Q1	J. Colp	2-1	1540		2/1	1540	9.3	>	N	Y
							LCAS			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Justin Colp

SIGNATURE of SAMPLER: Justin Colp

DATE Signed (MM/DD/YY): 2-1-24

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

pH ✓ 90719 SM 2/2/24

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

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

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

SAMPLE ID (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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: JOP-257-401	JOP-257-402	JOP-845-401	JOP-PGMP-401	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	G105	WT					2	1		1							X				24010966-033
2	G107	WT		2-1-24	0915		2	1		1							X				24010966-034
3	G109	WT					2	1		1							X				24010966-035
4	G111_LF	WT					2	1		1							X				24010966-036
5	XPW01_pore	WT					2	1		1						X		X			24010966-037
6	XPW02_pore	WT					2	1		1						X		X			24010966-038
7	XPW03_pore	WT					2	1		1						X		X			24010966-039
8	XSG01	WT					0									X		X			24010966-040
9	YSG03	WT					0									X	X	X			24010966-041
10	Field Blank	WT		2-1-24	1142		2	1		1						X	X	X	X		24010966-042
11	G052D Duplicate	WT					2	1		1						X		X			24010966-043
12	G012S Duplicate	WT		2-1-24	1117		2	1		1									X		24010966-044
13	Equipment Blank 1	WT		2-1-24	1200		2	1		1						X	X	X	X		24010966-045
14	Equipment Blank 2	WT					2	1		1						X	X	X	X		24010966-046
15	Equipment Blank 3	WT					2	1		1						X	X	X	X		24010966-047
16																					

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Justin Colp

SIGNATURE of SAMPLER: Justin Colp DATE Signed (MM/DD/YY): 2-1-24

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Y	N	

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary
Joppa- 1Q 2024

			Weather				Well Condition				
WO Sample	Well ID	Program/ Sample Type	Temp (°F)	Precipitation	Wind Direction	Sky	Well Pad	Casing	Protective Cover	Reference Mark/ ID	Well Locked
001	G001D	Groundwater Sample	39.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
002	G002D	Groundwater Sample	39.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
003	G003	Groundwater Sample	39.0	Light	W	Partly cloudy	Good	Good	Good	Yes	Yes
004	G005	Groundwater Sample	44.0	None	S	Clear	Good	Good	Good	Yes	Yes
005	G006	Groundwater Sample	49.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
006	G007	Groundwater Sample	44.0	Light	E	Partly cloudy	Good	Good	Good	Yes	Yes
007	G008	Groundwater Sample	50.0	None	SE	Partly cloudy	Good	Good	Good	Yes	Yes
008	G009	Groundwater Sample	40.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
009	G010	Groundwater Sample	51.0	None	SE	Partly cloudy	Good	Good	Good	Yes	Yes
010	G011	Groundwater Sample	39.0	None	W	Partly cloudy	Good	Good	Good	Yes	Yes
011	G012S	Groundwater Sample	46.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
012	G012D	Groundwater Sample	52.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
013	G013S	Groundwater Sample	44.0	None	S	Cloudy	Good	Good	Good	Yes	Yes
014	G013D	Groundwater Sample	44.0	None	S	Cloudy	Good	Good	Good	Yes	Yes
015	G016S	Groundwater Sample	52.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
016	G018S	Groundwater Sample	45.0	None	S	Partly cloudy	Good	Good	Good	Yes	Yes
017	G019S	Groundwater Sample	40.0	None	S	Partly cloudy	Good	Good	Good	Yes	Yes
018	G019D	Groundwater Sample	40.0	None	S	Partly cloudy	Good	Good	Good	Yes	Yes
019	G020S	Groundwater Sample	42.0	Light	NE	Partly cloudy	Good	Good	Good	Yes	Yes
020	G020D	Groundwater Sample	42.0	Light	NE	Partly cloudy	Good	Good	Good	Yes	Yes
021	G021S	Groundwater Sample	40.0	Light	NE	Partly cloudy	Good	Good	Good	Yes	Yes
022	G021D	Groundwater Sample	38.0	Light	NE	Partly cloudy	Good	Good	Good	Yes	Yes
023	G022S	Groundwater Sample	37.0	None	S	Partly cloudy	Good	Good	Good	Yes	Yes
024	G022D	Groundwater Sample	37.0	None	S	Partly cloudy	Good	Good	Good	Yes	Yes
025	G023S	Groundwater Sample	43.0	None	S	Partly cloudy	Good	Good	Good	Yes	Yes
026	G024S	Groundwater Sample	39.0	None	S	Partly cloudy	Good	Good	Good	Yes	Yes
027	G051D	Groundwater Sample	39.0	None	W	Partly cloudy	Good	Good	Good	Yes	Yes
028	G052D	Groundwater Sample	39.0	None	S	Cloudy	Good	Good	Good	Yes	Yes
029	G053D	Groundwater Sample	50.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
030	G054D	Groundwater Sample	44.0	None	S	Cloudy	Good	Good	Good	Yes	Yes
031	G101_LF	Groundwater Sample	49.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
032	G102	Groundwater Sample	49.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
033	G105	Groundwater Sample	48.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
034	G107	Groundwater Sample	35.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
035	G109	Groundwater Sample	48.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
036	G111_LF	Groundwater Sample	47.0	None	E	Partly cloudy	Good	Good	Good	Yes	Yes
037	XPW01_pore	Groundwater Sample	39.0	None	W	Partly cloudy	Good	Good	Good	Yes	Yes
038	XPW02_pore	Groundwater Sample	41.0	None	S	Partly cloudy	Good	Good	Good	Yes	Yes
039	XPW03_pore	Groundwater Sample	39.0	None	W	Partly cloudy	Good	Good	Good	Yes	Yes
040	XSG01	DTW Only	41.0	None	S	Partly cloudy					
041	YSG03	DTW Only	38.0	None	S	Partly cloudy					
042	Field Blank	QA/QC Sample	35.0	None	N	Partly cloudy					

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary
Joppa- 1Q 2024

			Weather				Well Condition				
WO Sample	Well ID	Program/ Sample Type	Temp (°F)	Precipitation	Wind Direction	Sky	Well Pad	Casing	Protective Cover	Reference Mark/ ID	Well Locked
043	G052D Duplicate	QA/QC Sample	39.0	None	S	Cloudy	Good	Good	Good	Yes	Yes
044	G012S Duplicate	QA/QC Sample	46.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
045	Equipment Blank 1	QA/QC Sample	46.0	None	N	Partly cloudy					

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary
Joppa- 1Q 2024

		GW Level Measurement				Purge Activities							
WO Sample	Well ID	Sampler Initials	Date/Time	DTW (ft)	DTB (ft)	Sampler Initials	Purge Date	Purge Start Time	Purge End Time	Purging Device	Well Diameter (in)	Actual Volume Purged (L)	Purge Rate (mL/min)
001	G001D	DC	1/29/24 12:48	44.51	67.10	TAC	1/29/2024	12:52	13:12	Bladder Pump	2"	5.0	250.0
002	G002D	DC	1/29/24 13:41	44.33	75.20	TAC	1/29/2024	13:42	13:59	Bladder Pump	2"	4.5	264.7
003	G003	DC	1/30/24 8:11	37.95	68.03	TAC	1/30/2024	08:15	10:05	Bladder Pump	2"	16.0	145.5
004	G005	TAC	1/31/24 11:45	43.95	62.92	TAC	1/31/2024	11:46	12:12	Bladder Pump	2"	2.5	96.2
005	G006	JC	1/30/24 11:29	40.66	62.76	JC	1/30/2024	11:31	12:28	Bladder Pump	2"	10.0	175.4
006	G007	JC	1/30/24 10:17	40.70	87.64	JC	1/30/2024	10:18	11:17	Bladder Pump	2"	11.0	186.4
007	G008	JC	1/30/24 13:05	30.82	86.82	JC	1/30/2024	13:06	14:06	Bladder Pump	2"	10.0	166.7
008	G009	JC	2/1/24 9:34	37.64	72.51	JC	2/1/2024	09:35	10:35	Bladder Pump	2"	10.0	166.7
009	G010	JC	1/30/24 14:14	38.75	73.04	JC	1/30/2024	14:15	15:07	Bladder Pump	2"	9.0	173.1
010	G011	DC	1/30/24 13:26	47.38	68.90	TAC	1/30/2024	13:27	14:08	Bladder Pump	2"	9.0	219.5
011	G012S	JC	2/1/24 11:02	46.90	72.78	JC	2/1/2024	11:03	11:17	Bladder Pump	2"	2.0	142.9
012	G012D	JC	2/1/24 11:47	46.91	92.96	JC	2/1/2024	11:49	12:04	Bladder Pump	2"	2.0	133.3
013	G013S	DC	1/31/24 13:14	40.00	62.66	TAC	1/31/2024	13:15	13:38	Bladder Pump	2"	4.0	173.9
014	G013D	TAC	1/31/24 13:45	41.92	92.85	TAC	1/31/2024	14:04	14:41	Bladder Pump	2"	6.0	162.2
015	G016S	JC	2/1/24 12:21	40.19	62.72	JC	2/1/2024	12:22	12:37	Bladder Pump	2"	2.0	133.3
016	G018S	JC	1/31/24 11:39	38.29		JC	1/31/2024	11:40	11:51	Bladder Pump	2"	2.5	227.3
017	G019S	JC	1/31/24 9:49	44.40	71.45	JC	1/31/2024	09:49	10:01	Bladder Pump	2"	2.5	208.3
018	G019D	JC	1/31/24 10:02	44.26	96.34	JC	1/31/2024	10:13	10:30	Bladder Pump	2"	2.5	147.1
019	G020S	JC	1/30/24 9:28	40.65	72.68	JC	1/30/2024	09:28	09:39	Bladder Pump	2"	2.0	181.8
020	G020D	JC	1/30/24 9:40	41.16	98.07	JC	1/30/2024	09:45	10:00	Bladder Pump	2"	2.0	133.3
021	G021S	JC	1/30/24 8:48	41.98	73.08	JC	1/30/2024	08:57	09:09	Bladder Pump	2"	2.0	166.7
022	G021D	JC	1/30/24 8:22	41.32	103.00	JC	1/30/2024	08:30	08:44	Bladder Pump	2"	2.5	178.6
023	G022S	JC	1/31/24 8:18	41.36	74.79	JC	1/31/2024	08:19	08:30	Bladder Pump	2"	2.5	227.3
024	G022D	JC	1/31/24 8:37	45.82	116.71	JC	1/31/2024	08:40	08:51	Bladder Pump	2"	2.0	181.8
025	G023S	JC	1/31/24 10:56	45.32		JC	1/31/2024	10:57	11:10	Bladder Pump	2"	2.0	153.8
026	G024S	JC	1/31/24 9:12	45.04		JC	1/31/2024	09:13	09:27	Bladder Pump	2"	2.0	142.9
027	G051D	DC	1/30/24 10:43	44.36	62.70	TAC	1/30/2024	10:45	11:12	Bladder Pump	2"	5.5	203.7
028	G052D	TAC	1/31/24 8:34	29.74	82.50	TAC	1/31/2024	08:37	09:08	Bladder Pump	2"	4.0	129.0
029	G053D	JC	1/30/24 12:42	38.46	60.60	JC	1/30/2024	12:41	12:52	Bladder Pump	2"	2.5	227.3
030	G054D	DC	1/31/24 10:18	39.58	83.50	TAC	1/31/2024	10:20	11:11	Bladder Pump	2"	9.0	176.5
031	G101_LF	JC	1/31/24 14:34	47.10	58.00	JC	1/31/2024	14:35	15:11	Bladder Pump	2"	6.0	166.7
032	G102	JC	1/31/24 14:04	59.63	70.70	JC	1/31/2024	14:04	14:23	Bladder Pump	2"	3.0	157.9
033	G105	JC	1/31/24 13:32	56.19	70.90	JC	1/31/2024	13:33	13:55	Bladder Pump	2"	3.0	136.4
034	G107	JC	2/1/24 8:13	55.20	71.00	JC	2/1/2024	08:15	09:15	Submersible Pump	2"	16.0	266.7
035	G109	JC	1/31/24 13:06	52.78	68.50	JC	1/31/2024	13:07	13:25	Bladder Pump	2"	3.0	166.7
036	G111_LF	JC	1/31/24 12:47	50.41	70.90	JC	1/31/2024	12:48	12:59	Bladder Pump	2"	3.0	272.7
037	XPW01_pore	DC	1/30/24 11:48	2.16	56.31	TAC	1/30/2024	11:52	12:14	Bladder Pump	2"	5.5	250.0
038	XPW02_pore	DC	1/29/24 14:30	2.13	32.52	TAC	1/29/2024	14:31	14:51	Bladder Pump	2"	5.0	250.0
039	XPW03_pore	DC	1/30/24 12:32	12.97	39.57	TAC	1/30/2024	12:34	13:02	Bladder Pump	2"	7.0	250.0
040	XSG01	JC	1/29/24 14:51	N/A									
041	YSG03	JC	1/29/24 11:52	40.53									
042	Field Blank												

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary
Joppa- 1Q 2024

		GW Level Measurement				Purge Activities							
WO Sample	Well ID	Sampler Initials	Date/Time	DTW (ft)	DTB (ft)	Sampler Initials	Purge Date	Purge Start Time	Purge End Time	Purging Device	Well Diameter (in)	Actual Volume Purged (L)	Purge Rate (mL/min)
043	G052D Duplicate	TAC	1/31/24 8:34	29.74	82.50	TAC	1/31/2024	08:37	09:08	Bladder Pump	2"	4.0	129.0
044	G012S Duplicate	JC	2/1/24 11:02	46.90	72.78	JC	2/1/2024	11:03	11:17	Bladder Pump	2"	2.0	142.9
045	Equipment Blank 1												

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary
Joppa- 1Q 2024

		Sampling Activities and Observations									
WO Sample	Well ID	Sampler Initials	Date	Time	Sampling Method	Field Filtered	Appearance	Odor	Color	Post-Sample DTW (ft)	Drawdown (ft)
001	G001D	DC	01/29/24	13:12	Low Flow	No	Clear	None	None	44.51	0
002	G002D	DC	01/29/24	13:59	Low Flow	No	Clear	None	None	44.39	0.06
003	G003	DC	01/30/24	10:05	Low Flow	No	Cloudy	None	Rust	39.02	1.07
004	G005	DC	01/31/24	12:12	Low Flow	No	Clear	None	None	45.12	1.17
005	G006	JC	01/30/24	12:28	Low Flow	No	Cloudy	None	rust	41.00	0.34
006	G007	JC	01/30/24	11:17	Low Flow	No	Cloudy	None	rust	41.09	0.39
007	G008	JC	01/30/24	14:06	Low Flow	No	Cloudy	None	rust	30.82	0
008	G009	JC	02/01/24	10:35	Low Flow	No	Cloudy	None	rust	37.64	0
009	G010	JC	01/30/24	15:07	Low Flow	No	Cloudy	None	rust	38.75	0
010	G011	DC	01/30/24	14:08	Low Flow	No	Cloudy	None	rust	47.58	0.2
011	G012S	JC	02/01/24	11:17	Low Flow	No	Slightly cloudy	None	none	47.00	0.1
012	G012D	JC	02/01/24	12:04	Low Flow	No	Clear	None	none	46.98	0.07
013	G013S	DC	01/31/24	13:38	Low Flow	No	Clear	None	None	39.97	-0.03
014	G013D	DC	01/31/24	14:41	Low Flow	No	Clear	None	None	41.89	-0.03
015	G016S	JC	02/01/24	12:37	Low Flow	No	Clear	None	none	40.19	0
016	G018S	JC	01/31/24	11:51	Low Flow	No	Clear	None	none	38.29	0
017	G019S	JC	01/31/24	10:01	Low Flow	No	Clear	None	none	44.40	0
018	G019D	JC	01/31/24	10:30	Low Flow	No	Clear	None	none	44.26	0
019	G020S	JC	01/30/24	09:39	Low Flow	No	Clear	None	none	40.65	0
020	G020D	JC	01/30/24	10:00	Low Flow	No	Clear	None	none	41.16	0
021	G021S	JC	01/30/24	09:09	Low Flow	No	Clear	None	none	41.98	0
022	G021D	JC	01/30/24	08:44	Low Flow	No	Clear	None	none	41.57	0.25
023	G022S	JC	01/31/24	08:30	Low Flow	No	Clear	None	none	41.36	0
024	G022D	JC	01/31/24	08:51	Low Flow	No	Clear	None	none	45.82	0
025	G023S	JC	01/31/24	11:10	Low Flow	No	Clear	None	none	45.32	0
026	G024S	JC	01/31/24	09:27	Low Flow	No	Clear	None	none	45.04	0
027	G051D	DC	01/30/24	11:12	Low Flow	No	Clear	None	None	44.59	0.23
028	G052D	DC	01/31/24	09:08	Low Flow	No	Clear	Slight	None	36.22	6.48
029	G053D	JC	01/30/24	12:52	Low Flow	No	Clear	None	none	38.46	0
030	G054D	DC	01/31/24	11:11	Low Flow	No	Clear	None	None	43.57	3.99
031	G101_LF	JC	01/31/24	15:11	Low Flow	No	Slightly cloudy	None	none	48.56	1.46
032	G102	JC	01/31/24	14:23	Low Flow	No	Clear	None	none	61.20	1.57
033	G105	JC	01/31/24	13:55	Low Flow	No	Clear	None	none	56.19	0
034	G107	JC	02/01/24	09:15	Low Flow	No	Slightly cloudy	None	none	58.98	3.78
035	G109	JC	01/31/24	13:25	Low Flow	No	Clear	None	none	55.81	3.03
036	G111_LF	JC	01/31/24	12:59	Low Flow	No	Clear	None	none	50.41	0
037	XPW01_pore	DC	01/30/24	12:14	Low Flow	No	Clear	None	None	4.52	2.36
038	XPW02_pore	DC	01/29/24	14:51	Low Flow	No	Clear	None	None	2.19	0.06
039	XPW03_pore	DC	01/30/24	13:02	Low Flow	No	Clear	None	None	23.32	10.35
040	XSG01										
041	YSG03										
042	Field Blank	JC	02/01/24	11:42							

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary
Joppa- 1Q 2024

		Sampling Activities and Observations									
WO Sample	Well ID	Sampler Initials	Date	Time	Sampling Method	Field Filtered	Appearance	Odor	Color	Post-Sample DTW (ft)	Drawdown (ft)
043	G052D Duplicate	DC	01/31/24	09:08	Low Flow	No	Clear	Slight	None	36.22	6.48
044	G012S Duplicate	JC	02/01/24	11:17	Low Flow	No	Slightly cloudy	None	none	47.00	0.1
045	Equipment Blank 1	JC	02/01/24	12:00							

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary
Joppa- 1Q 2024

WO Sample	Well ID	COMMENTS
001	G001D	
002	G002D	
003	G003	
004	G005	
005	G006	
006	G007	
007	G008	
008	G009	
009	G010	
010	G011	
011	G012S	
012	G012D	
013	G013S	
014	G013D	
015	G016S	
016	G018S	
017	G019S	
018	G019D	
019	G020S	
020	G020D	
021	G021S	
022	G021D	
023	G022S	
024	G022D	
025	G023S	
026	G024S	
027	G051D	
028	G052D	
029	G053D	
030	G054D	
031	G101_LF	
032	G102	
033	G105	
034	G107	
035	G109	
036	G111_LF	
037	XPW01_pore	
038	XPW02_pore	
039	XPW03_pore	
040	XSG01	Water below bottom of in-place measuring stick
041	YSG03	
042	Field Blank	

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary
Joppa- 1Q 2024

WO Sample	Well ID	COMMENTS
043	G052D Duplicate	
044	G012S Duplicate	
045	Equipment Blank 1	Blank from submersible pump

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Stabilized Field Parameters Summary
Joppa- 1Q 2024

Well ID	Date	Time	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	LIMS ID
G001D	1/29/2024	13:12	15.0	59.0	6.45	440.3	1.10	17.11	147.4	44.51	24010966-001A
G002D	1/29/2024	13:59	13.8	56.8	6.42	336.6	2.34	2.95	151.0	44.33	24010966-002A
G003	1/30/2024	10:05	14.2	57.6	6.28	399.2	3.90	339.46	158.7	37.95	24010966-003A
G005	1/31/2024	12:12	15.4	59.7	6.41	538.5	1.29	10.20	89.5	43.95	24010966-004A
G006	1/30/2024	12:28	13.5	56.3	6.56	573.0	1.25	277.42	150.0	40.66	24010966-005A
G007	1/30/2024	11:17	14.3	57.7	6.33	710.3	0.97	276.07	156.3	40.70	24010966-006A
G008	1/30/2024	14:06	14.6	58.3	6.94	735.4	0.77	162.19	137.0	30.82	24010966-007A
G009	2/1/2024	10:35	16.0	60.8	6.03	593.9	2.48	346.90	161.4	37.64	24010966-008A
G010	1/30/2024	15:07	14.1	57.4	6.37	815.7	2.23	311.35	158.0	38.75	24010966-009A
G011	1/30/2024	14:08	15.6	60.1	5.97	558.4	1.38	177.11	126.8	47.38	24010966-010A
G012S	2/1/2024	11:17	14.0	57.2	6.51	547.1	3.78	21.10	147.5	46.90	24010966-011A
G012D	2/1/2024	12:04	14.2	57.6	6.59	548.6	2.71	22.41	145.5	46.91	24010966-012A
G013S	1/31/2024	13:38	14.2	57.6	6.53	549.3	0.95	11.70	127.5	40.00	24010966-013A
G013D	1/31/2024	14:41	14.5	58.1	6.57	547.1	2.23	1.61	137.1	41.92	24010966-014A
G016S	2/1/2024	12:37	14.3	57.7	6.64	752.4	2.76	9.29	146.2	40.19	24010966-015A
G018S	1/31/2024	11:51	15.2	59.4	6.55	391.5	3.84	8.27	151.6	38.29	24010966-016A
G019S	1/31/2024	10:01	14.8	58.6	6.43	501.9	4.78	5.28	153.1	44.40	24010966-017A
G019D	1/31/2024	10:30	15.0	59.0	6.56	401.7	4.65	6.70	151.1	44.26	24010966-018A
G020S	1/30/2024	9:39	13.9	57.0	6.52	470.4	3.91	3.37	150.5	40.65	24010966-019A
G020D	1/30/2024	10:00	12.9	55.2	6.71	489.7	3.02	3.46	149.7	41.16	24010966-020A
G021S	1/30/2024	9:09	13.0	55.4	6.48	750.7	3.24	4.00	162.1	41.98	24010966-021A
G021D	1/30/2024	8:44	12.9	55.2	6.41	616.1	2.23	21.74	158.0	41.32	24010966-022A
G022S	1/31/2024	8:30	14.6	58.3	6.18	408.7	4.34	13.62	146.9	41.36	24010966-023A
G022D	1/31/2024	8:51	14.5	58.1	6.43	302.0	2.22	6.16	152.3	45.82	24010966-024A
G023S	1/31/2024	11:10	14.5	58.1	6.54	334.9	4.72	16.42	149.9	45.32	24010966-025A
G024S	1/31/2024	9:27	14.9	58.8	6.98	211.3	2.83	13.81	137.6	45.04	24010966-026A
G051D	1/30/2024	11:12	15.6	60.1	5.49	341.2	3.54	54.34	188.2	44.36	24010966-027A
G052D	1/31/2024	9:08	11.8	53.2	6.30	368.0	1.51	2.51	-55.6	29.74	24010966-028A
G053D	1/30/2024	12:52	15.0	59.0	6.49	395.8	1.78	7.12	150.2	38.46	24010966-029A
G054D	1/31/2024	11:11	14.7	58.5	6.48	687.5	0.73	6.88	17.5	39.58	24010966-030A
G101_LF	1/31/2024	15:11	14.6	58.3	6.47	258.8	6.77	55.18	154.5	47.10	24010966-031A
G102	1/31/2024	14:23	15.3	59.5	6.27	245.3	7.64	10.17	157.9	59.63	24010966-032A
G105	1/31/2024	13:55	15.9	60.6	6.05	322.1	7.88	8.88	165.3	56.19	24010966-033A
G107	2/1/2024	9:15	14.8	58.6	6.35	661.0	3.12	29.04	164.7	55.20	24010966-034A
G109	1/31/2024	13:25	16.3	61.3	6.35	221.7	5.83	11.50	149.8	52.78	24010966-035A
G111_LF	1/31/2024	12:59	16.3	61.3	6.62	296.4	4.86	7.61	140.0	50.41	24010966-036A
XPW01_pore	1/30/2024	12:14	16.1	61.0	8.44	799.6	0.43	4.79	-30.8	2.16	24010966-037A
XPW02_pore	1/29/2024	14:51	15.3	59.5	7.72	4,118.2	0.48	13.32	-54.7	2.13	24010966-038A
XPW03_pore	1/30/2024	13:02	16.3	61.3	10.85	583.9	1.87	2.37	2.0	12.97	24010966-039A
XSG01	1/29/2024	14:51	DTW Only							N/A	24010966-040A
YSG03	1/29/2024	11:52	DTW Only							40.53	24010966-041A
Field Blank	2/1/2024	11:42	QA/QC Sample								24010966-042A

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Stabilized Field Parameters Summary
Joppa- 1Q 2024

Well ID	Date	Time	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	LIMS ID
G052D Duplicate	1/31/2024	9:08	11.8	53.2	6.30	368.0	1.51	2.51	-55.6	29.74	24010966-043A
G012S Duplicate	2/1/2024	11:17	14.0	57.2	6.51	547.1	3.78	21.10	147.5	46.90	24010966-044A
Equipment Blank 1	2/1/2024	12:00	QA/QC Sample								24010966-045A

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G001D	1/29/2024	13:03	44.51	14.8	58.6	6.49	437.8	1.12	19.60	149.8
G001D	1/29/2024	13:06	44.51	14.9	58.8	6.47	436.9	0.90	12.54	148.7
G001D	1/29/2024	13:09	44.51	15.0	59.0	6.46	437.0	1.05	10.13	147.9
G001D	1/29/2024	13:12	44.51	15.0	59.0	6.45	440.3	1.10	17.11	147.4

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G002D	1/29/2024	13:50	44.33	13.8	56.8	6.50	337.9	2.70	5.11	150.4
G002D	1/29/2024	13:53	44.33	13.8	56.8	6.44	337.7	2.48	4.12	151.0
G002D	1/29/2024	13:56	44.33	13.8	56.8	6.43	337.5	2.40	3.32	151.1
G002D	1/29/2024	13:59	44.33	13.8	56.8	6.42	336.6	2.34	2.95	151.0

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G003	1/30/2024	9:35	37.95	13.6	56.5	6.25	427.6	3.72	553.35	150.8
G003	1/30/2024	9:38	37.95	13.5	56.3	6.26	421.5	3.72	542.10	151.6
G003	1/30/2024	9:41	37.95	13.8	56.8	6.26	418.0	3.73	513.93	152.4
G003	1/30/2024	9:44	37.95	13.6	56.5	6.26	415.9	3.74	479.52	153.3
G003	1/30/2024	9:47	37.95	13.7	56.7	6.27	412.7	3.75	476.16	154.1
G003	1/30/2024	9:50	37.95	13.8	56.8	6.26	409.5	3.80	488.46	155.5
G003	1/30/2024	9:53	37.95	13.9	57.0	6.28	408.6	4.32	397.67	156.0
G003	1/30/2024	9:56	37.95	14.0	57.2	6.28	405.4	4.10	409.94	156.6
G003	1/30/2024	9:59	37.95	14.0	57.2	6.28	403.4	3.98	372.11	157.4
G003	1/30/2024	10:02	37.95	14.1	57.4	6.28	401.1	3.92	360.21	158.1
G003	1/30/2024	10:05	37.95	14.2	57.6	6.28	399.2	3.90	339.46	158.7

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G005	1/31/2024	12:00	43.95	15.3	59.5	6.43	538.3	2.43	19.06	91.3
G005	1/31/2024	12:03	43.95	15.3	59.5	6.42	540.6	2.01	13.10	90.6
G005	1/31/2024	12:06	43.95	15.4	59.7	6.41	539.2	1.66	10.52	90.0
G005	1/31/2024	12:09	43.95	15.3	59.5	6.41	540.5	1.44	10.45	89.6
G005	1/31/2024	12:12	43.95	15.4	59.7	6.41	538.5	1.29	10.20	89.5

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G006	1/30/2024	12:13	40.66	13.7	56.7	6.55	569.8	1.48	428.18	150.9
G006	1/30/2024	12:16	40.66	13.8	56.8	6.55	571.0	1.43	383.06	150.7
G006	1/30/2024	12:19	40.66	13.9	57.0	6.55	572.2	1.37	367.04	150.5
G006	1/30/2024	12:22	40.66	13.6	56.5	6.55	572.1	1.33	328.71	150.3
G006	1/30/2024	12:25	40.66	13.8	56.8	6.55	572.3	1.29	290.07	150.1
G006	1/30/2024	12:28	40.66	13.5	56.3	6.56	573.0	1.25	277.42	150.0

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G007	1/30/2024	10:50	40.70	14.1	57.4	6.29	689.2	1.32	539.11	158.0
G007	1/30/2024	10:53	40.70	14.1	57.4	6.30	695.4	1.26	478.94	157.7
G007	1/30/2024	10:56	40.70	14.0	57.2	6.31	699.7	1.21	460.47	157.5
G007	1/30/2024	10:59	40.70	14.1	57.4	6.31	702.9	1.16	419.79	157.3
G007	1/30/2024	11:02	40.70	14.1	57.4	6.32	704.2	1.12	381.64	157.2
G007	1/30/2024	11:05	40.70	14.2	57.6	6.32	707.4	1.08	354.10	157.0
G007	1/30/2024	11:08	40.70	14.2	57.6	6.32	707.8	1.05	340.37	156.8
G007	1/30/2024	11:11	40.70	14.2	57.6	6.33	708.4	1.02	312.93	156.6
G007	1/30/2024	11:14	40.70	14.3	57.7	6.33	709.5	1.00	291.49	156.5
G007	1/30/2024	11:17	40.70	14.3	57.7	6.33	710.3	0.97	276.07	156.3

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G008	1/30/2024	13:45	30.82	14.6	58.3	6.93	731.2	0.86	309.42	140.3
G008	1/30/2024	13:48	30.82	14.7	58.5	6.93	731.7	0.84	281.90	139.8
G008	1/30/2024	13:51	30.82	14.6	58.3	6.93	732.9	0.83	252.11	139.3
G008	1/30/2024	13:54	30.82	14.6	58.3	6.93	732.3	0.82	227.21	138.8
G008	1/30/2024	13:57	30.82	14.6	58.3	6.93	734.3	0.80	208.53	138.4
G008	1/30/2024	14:00	30.82	14.6	58.3	6.93	734.3	0.79	188.16	137.9
G008	1/30/2024	14:03	30.82	14.6	58.3	6.94	734.8	0.78	173.96	137.4
G008	1/30/2024	14:06	30.82	14.6	58.3	6.94	735.4	0.77	162.19	137.0

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G009	2/1/2024	10:08	37.64	15.6	60.1	6.06	586.4	2.75	620.31	162.0
G009	2/1/2024	10:11	37.64	15.6	60.1	6.05	587.4	2.70	580.81	162.0
G009	2/1/2024	10:14	37.64	15.7	60.3	6.05	588.8	2.65	535.08	161.9
G009	2/1/2024	10:17	37.64	15.7	60.3	6.04	589.8	2.60	497.09	162.0
G009	2/1/2024	10:20	37.64	15.7	60.3	6.04	590.4	2.61	468.75	162.0
G009	2/1/2024	10:23	37.64	15.8	60.4	6.04	590.7	2.55	447.61	161.8
G009	2/1/2024	10:26	37.64	15.8	60.4	6.04	591.9	2.50	409.81	161.7
G009	2/1/2024	10:29	37.64	15.8	60.4	6.03	592.2	2.47	400.03	161.7
G009	2/1/2024	10:32	37.64	15.9	60.6	6.04	593.1	2.48	365.35	161.4
G009	2/1/2024	10:35	37.64	16.0	60.8	6.03	593.9	2.48	346.90	161.4

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G010	1/30/2024	14:43	38.75	14.2	57.6	6.39	820.3	3.07	532.82	158.2
G010	1/30/2024	14:46	38.75	14.2	57.6	6.38	819.9	2.90	475.19	158.2
G010	1/30/2024	14:49	38.75	14.3	57.7	6.38	819.6	2.75	427.82	158.2
G010	1/30/2024	14:52	38.75	14.2	57.6	6.38	819.4	2.63	420.74	158.2
G010	1/30/2024	14:55	38.75	14.5	58.1	6.37	819.2	2.51	393.93	158.1
G010	1/30/2024	14:58	38.75	14.5	58.1	6.37	819.7	2.42	358.17	158.1
G010	1/30/2024	15:01	38.75	14.3	57.7	6.37	818.7	2.35	347.52	158.0
G010	1/30/2024	15:04	38.75	14.2	57.6	6.37	816.6	2.28	315.18	158.0
G010	1/30/2024	15:07	38.75	14.1	57.4	6.37	815.7	2.23	311.35	158.0

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G011	1/30/2024	13:38	47.38	15.5	59.9	6.33	782.5	3.66	15.94	105.6
G011	1/30/2024	13:41	47.38	15.5	59.9	6.15	792.1	2.92	18.28	112.8
G011	1/30/2024	13:44	47.38	15.5	59.9	6.07	778.2	2.56	127.07	117.3
G011	1/30/2024	13:47	47.38	15.4	59.7	6.03	710.6	2.20	406.01	119.5
G011	1/30/2024	13:50	47.38	15.6	60.1	6.01	658.4	1.92	464.15	121.1
G011	1/30/2024	13:53	47.38	15.6	60.1	6.00	630.0	1.73	486.93	122.4
G011	1/30/2024	13:56	47.38	15.6	60.1	5.99	613.9	1.62	425.57	123.5
G011	1/30/2024	13:59	47.38	15.6	60.1	5.98	598.6	1.55	377.33	124.5
G011	1/30/2024	14:02	47.38	15.5	59.9	5.98	584.3	1.49	298.40	125.3
G011	1/30/2024	14:05	47.38	15.6	60.1	5.97	564.5	1.45	213.49	126.1
G011	1/30/2024	14:08	47.38	15.6	60.1	5.97	558.4	1.38	177.11	126.8

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G012S	2/1/2024	11:11	46.90	13.6	56.5	6.66	546.2	6.35	21.14	144.1
G012S	2/1/2024	11:14	46.90	13.9	57.0	6.55	546.7	4.78	20.98	146.8
G012S	2/1/2024	11:17	46.90	14.0	57.2	6.51	547.1	3.78	21.10	147.5

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G012D	2/1/2024	11:52	46.91	13.9	57.0	6.74	548.0	6.94	13.12	144.3
G012D	2/1/2024	11:55	46.91	14.2	57.6	6.67	549.8	5.07	16.73	144.8
G012D	2/1/2024	11:58	46.91	14.2	57.6	6.63	549.6	4.03	18.50	145.1
G012D	2/1/2024	12:01	46.91	14.3	57.7	6.61	548.8	3.25	20.58	145.4
G012D	2/1/2024	12:04	46.91	14.2	57.6	6.59	548.6	2.71	22.41	145.5

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G013S	1/31/2024	13:29	40.00	14.3	57.7	6.56	550.1	1.36	7.32	128.7
G013S	1/31/2024	13:32	40.00	14.3	57.7	6.55	550.9	1.15	8.56	128.5
G013S	1/31/2024	13:35	40.00	14.3	57.7	6.54	550.0	1.03	9.87	128.1
G013S	1/31/2024	13:38	40.00	14.2	57.6	6.53	549.3	0.95	11.70	127.5

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G013D	1/31/2024	14:29	41.92	14.3	57.7	6.58	548.2	2.49	3.74	138.4
G013D	1/31/2024	14:32	41.92	14.5	58.1	6.58	547.8	2.42	1.92	138.1
G013D	1/31/2024	14:35	41.92	14.4	57.9	6.57	548.7	2.21	2.08	137.8
G013D	1/31/2024	14:38	41.92	14.3	57.7	6.57	547.4	2.16	1.21	137.4
G013D	1/31/2024	14:41	41.92	14.5	58.1	6.57	547.1	2.23	1.61	137.1

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G016S	2/1/2024	12:28	40.19	14.4	57.9	6.67	746.7	5.55	19.22	144.9
G016S	2/1/2024	12:31	40.19	14.3	57.7	6.65	750.6	4.35	17.30	146.1
G016S	2/1/2024	12:34	40.19	14.3	57.7	6.64	752.3	3.29	9.85	146.2
G016S	2/1/2024	12:37	40.19	14.3	57.7	6.64	752.4	2.76	9.29	146.2

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G018S	1/31/2024	11:45	38.29	15.2	59.4	6.77	392.3	4.90	32.37	148.9
G018S	1/31/2024	11:48	38.29	15.2	59.4	6.61	392.4	4.17	14.74	151.0
G018S	1/31/2024	11:51	38.29	15.2	59.4	6.55	391.5	3.84	8.27	151.6

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G019S	1/31/2024	9:55	44.40	14.8	58.6	6.67	502.4	6.29	5.06	148.0
G019S	1/31/2024	9:58	44.40	14.7	58.5	6.51	502.4	5.35	5.79	151.5
G019S	1/31/2024	10:01	44.40	14.8	58.6	6.43	501.9	4.78	5.28	153.1

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G019D	1/31/2024	10:24	44.26	15.0	59.0	6.71	402.9	6.94	5.87	148.4
G019D	1/31/2024	10:27	44.26	15.0	59.0	6.60	401.8	5.45	6.53	150.4
G019D	1/31/2024	10:30	44.26	15.0	59.0	6.56	401.7	4.65	6.70	151.1

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G020S	1/30/2024	9:33	40.65	13.9	57.0	6.61	473.3	6.38	3.94	146.5
G020S	1/30/2024	9:36	40.65	13.9	57.0	6.54	470.6	4.62	3.98	149.5
G020S	1/30/2024	9:39	40.65	13.9	57.0	6.52	470.4	3.91	3.37	150.5

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G020D	1/30/2024	9:54	41.16	12.4	54.3	6.80	480.1	5.99	4.51	149.4
G020D	1/30/2024	9:57	41.16	12.8	55.0	6.73	486.5	3.89	4.33	150.0
G020D	1/30/2024	10:00	41.16	12.9	55.2	6.71	489.7	3.02	3.46	149.7

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G021S	1/30/2024	9:03	41.98	12.5	54.5	6.77	721.9	6.82	3.90	159.7
G021S	1/30/2024	9:06	41.98	12.9	55.2	6.55	745.7	4.39	3.71	162.0
G021S	1/30/2024	9:09	41.98	13.0	55.4	6.48	750.7	3.24	4.00	162.1

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G021D	1/30/2024	8:35	41.32	12.3	54.1	6.08	614.5	6.84	4.42	159.1
G021D	1/30/2024	8:38	41.32	12.8	55.0	6.22	614.1	3.90	19.58	160.4
G021D	1/30/2024	8:41	41.32	12.8	55.0	6.32	616.2	2.80	20.44	160.2
G021D	1/30/2024	8:44	41.32	12.9	55.2	6.41	616.1	2.23	21.74	158.0

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G022S	1/31/2024	8:24	41.36	14.1	57.4	6.05	418.1	6.60	8.64	137.1
G022S	1/31/2024	8:27	41.36	14.5	58.1	6.14	408.9	5.07	12.46	142.7
G022S	1/31/2024	8:30	41.36	14.6	58.3	6.18	408.7	4.34	13.62	146.9

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G022D	1/31/2024	8:45	45.82	14.4	57.9	6.65	375.3	4.97	4.71	146.6
G022D	1/31/2024	8:48	45.82	14.5	58.1	6.53	338.0	2.97	5.72	149.7
G022D	1/31/2024	8:51	45.82	14.5	58.1	6.43	302.0	2.22	6.16	152.3

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G023S	1/31/2024	11:04	45.32	14.6	58.3	6.70	332.0	5.46	20.93	145.9
G023S	1/31/2024	11:07	45.32	14.5	58.1	6.58	334.5	4.98	21.00	148.6
G023S	1/31/2024	11:10	45.32	14.5	58.1	6.54	334.9	4.72	16.42	149.9

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G024S	1/31/2024	9:18	45.04	14.8	58.6	6.96	273.4	5.92	23.85	135.9
G024S	1/31/2024	9:21	45.04	15.0	59.0	6.97	231.1	4.35	21.71	137.2
G024S	1/31/2024	9:24	45.04	14.9	58.8	6.98	216.2	3.41	17.33	137.5
G024S	1/31/2024	9:27	45.04	14.9	58.8	6.98	211.3	2.83	13.81	137.6

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G051D	1/30/2024	10:57	44.36	15.3	59.5	5.52	342.5	3.79	34.73	187.6
G051D	1/30/2024	11:00	44.36	15.4	59.7	5.52	341.2	3.70	74.33	187.8
G051D	1/30/2024	11:03	44.36	15.5	59.9	5.51	341.2	3.66	98.36	188.0
G051D	1/30/2024	11:06	44.36	15.6	60.1	5.50	342.1	3.59	76.60	187.9
G051D	1/30/2024	11:09	44.36	15.5	59.9	5.50	341.9	3.59	67.67	188.0
G051D	1/30/2024	11:12	44.36	15.6	60.1	5.49	341.2	3.54	54.34	188.2

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G052D	1/31/2024	8:56	29.74	12.0	53.6	6.26	371.3	2.14	3.38	-36.4
G052D	1/31/2024	8:59	29.74	11.7	53.1	6.27	369.4	1.89	3.02	-42.7
G052D	1/31/2024	9:02	29.74	11.9	53.4	6.28	368.9	1.72	3.22	-47.8
G052D	1/31/2024	9:05	29.74	11.9	53.4	6.29	368.5	1.64	2.62	-52.0
G052D	1/31/2024	9:08	29.74	11.8	53.2	6.30	368.0	1.51	2.51	-55.6

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G053D	1/30/2024	12:46	38.46	14.8	58.6	6.83	389.7	6.13	22.93	143.4
G053D	1/30/2024	12:49	38.46	14.9	58.8	6.57	395.1	2.68	10.59	148.9
G053D	1/30/2024	12:52	38.46	15.0	59.0	6.49	395.8	1.78	7.12	150.2

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G054D	1/31/2024	10:56	39.58	14.5	58.1	6.47	687.7	0.70	21.41	22.0
G054D	1/31/2024	10:59	39.58	14.7	58.5	6.47	688.7	0.75	15.29	20.9
G054D	1/31/2024	11:02	39.58	14.6	58.3	6.47	689.1	0.72	12.73	20.1
G054D	1/31/2024	11:05	39.58	14.5	58.1	6.47	685.7	0.70	9.78	19.3
G054D	1/31/2024	11:08	39.58	14.7	58.5	6.48	687.8	0.73	7.22	18.3
G054D	1/31/2024	11:11	39.58	14.7	58.5	6.48	687.5	0.73	6.88	17.5

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G101_LF	1/31/2024	14:47	47.10	14.7	58.5	6.49	260.1	6.73	145.74	153.2
G101_LF	1/31/2024	14:50	47.10	14.7	58.5	6.48	259.3	6.70	123.15	153.5
G101_LF	1/31/2024	14:53	47.10	14.8	58.6	6.48	259.2	6.67	95.87	153.5
G101_LF	1/31/2024	14:56	47.10	14.7	58.5	6.47	259.5	6.72	79.36	154.0
G101_LF	1/31/2024	14:59	47.10	14.7	58.5	6.47	258.8	6.73	73.11	154.1
G101_LF	1/31/2024	15:02	47.10	14.6	58.3	6.48	258.9	6.74	65.14	153.9
G101_LF	1/31/2024	15:05	47.10	14.5	58.1	6.47	258.9	6.77	62.41	154.5
G101_LF	1/31/2024	15:08	47.10	14.6	58.3	6.47	259.1	6.79	58.32	154.4
G101_LF	1/31/2024	15:11	47.10	14.6	58.3	6.47	258.8	6.77	55.18	154.5

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G102	1/31/2024	14:17	59.63	15.6	60.1	6.30	245.6	7.85	14.40	156.6
G102	1/31/2024	14:20	59.63	15.4	59.7	6.29	245.2	7.69	13.05	157.2
G102	1/31/2024	14:23	59.63	15.3	59.5	6.27	245.3	7.64	10.17	157.9

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G105	1/31/2024	13:46	56.19	16.1	61.0	6.10	335.9	7.88	14.24	163.3
G105	1/31/2024	13:49	56.19	16.0	60.8	6.07	326.4	7.89	12.18	164.1
G105	1/31/2024	13:52	56.19	16.1	61.0	6.06	322.8	7.89	6.04	164.8
G105	1/31/2024	13:55	56.19	15.9	60.6	6.05	322.1	7.88	8.88	165.3

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G107	2/1/2024	9:00	55.20	14.4	57.9	6.34	661.5	3.12	86.34	165.9
G107	2/1/2024	9:03	55.20	14.6	58.3	6.34	662.0	3.11	61.29	165.6
G107	2/1/2024	9:06	55.20	13.9	57.0	6.35	662.3	3.13	47.29	165.3
G107	2/1/2024	9:09	55.20	13.6	56.5	6.36	660.9	3.14	39.25	165.1
G107	2/1/2024	9:12	55.20	14.4	57.9	6.35	660.1	3.13	37.73	165.0
G107	2/1/2024	9:15	55.20	14.8	58.6	6.35	661.0	3.12	29.04	164.7

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G109	1/31/2024	13:10	52.78	16.6	61.9	6.67	235.6	7.83	9.56	141.5
G109	1/31/2024	13:13	52.78	15.7	60.3	6.54	232.8	6.97	37.10	144.4
G109	1/31/2024	13:16	52.78	16.2	61.2	6.44	225.7	6.29	30.01	146.7
G109	1/31/2024	13:19	52.78	16.3	61.3	6.40	223.5	6.02	20.09	148.1
G109	1/31/2024	13:22	52.78	16.2	61.2	6.38	222.5	5.90	15.27	148.8
G109	1/31/2024	13:25	52.78	16.3	61.3	6.35	221.7	5.83	11.50	149.8

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G111_LF	1/31/2024	12:53	50.41	16.3	61.3	6.94	297.6	6.29	11.67	139.8
G111_LF	1/31/2024	12:56	50.41	16.3	61.3	6.71	296.9	5.20	9.43	139.8
G111_LF	1/31/2024	12:59	50.41	16.3	61.3	6.62	296.4	4.86	7.61	140.0

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XPW01_pore	1/30/2024	12:05	2.16	16.0	60.8	8.38	788.5	0.67	9.78	2.1
XPW01_pore	1/30/2024	12:08	2.16	16.0	60.8	8.42	790.4	0.54	7.47	-10.4
XPW01_pore	1/30/2024	12:11	2.16	15.9	60.6	8.45	791.2	0.49	5.98	-22.3
XPW01_pore	1/30/2024	12:14	2.16	16.1	61.0	8.44	799.6	0.43	4.79	-30.8

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XPW02_pore	1/29/2024	14:42	2.13	15.0	59.0	7.66	4,087.7	0.63	21.41	54.6
XPW02_pore	1/29/2024	14:45	2.13	15.1	59.2	7.69	4,107.2	0.56	18.16	11.6
XPW02_pore	1/29/2024	14:48	2.13	15.2	59.4	7.71	4,114.1	0.51	15.52	-26.0
XPW02_pore	1/29/2024	14:51	2.13	15.3	59.5	7.72	4,118.2	0.48	13.32	-54.7

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XPW03_pore	1/30/2024	12:44	12.97	15.9	60.6	10.88	578.7	2.41	9.70	3.8
XPW03_pore	1/30/2024	12:47	12.97	16.1	61.0	10.87	580.0	2.12	6.65	3.3
XPW03_pore	1/30/2024	12:50	12.97	16.2	61.2	10.86	581.0	2.30	4.24	2.8
XPW03_pore	1/30/2024	12:53	12.97	16.2	61.2	10.86	582.7	2.24	2.91	2.6
XPW03_pore	1/30/2024	12:56	12.97	16.1	61.0	10.86	582.6	2.25	2.54	2.6
XPW03_pore	1/30/2024	12:59	12.97	16.2	61.2	10.85	583.5	1.97	2.34	2.1
XPW03_pore	1/30/2024	13:02	12.97	16.3	61.3	10.85	583.9	1.87	2.37	2.0

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XSG01	1/29/2024	14:51	N/A	DTW Only						

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
YSG03	1/29/2024	12:00	40.53	DTW Only						

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
Field Blank	2/1/2024	11:42	QA/QC Sample							

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G052D Duplicate	1/31/2024	8:56	29.74	12.0	53.6	6.26	371.3	2.14	3.38	-36.4
G052D Duplicate	1/31/2024	8:59	29.74	11.7	53.1	6.27	369.4	1.89	3.02	-42.7
G052D Duplicate	1/31/2024	9:02	29.74	11.9	53.4	6.28	368.9	1.72	3.22	-47.8
G052D Duplicate	1/31/2024	9:05	29.74	11.9	53.4	6.29	368.5	1.64	2.62	-52.0
G052D Duplicate	1/31/2024	9:08	29.74	11.8	53.2	6.30	368.0	1.51	2.51	-55.6

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G012S Duplicate	2/1/2024	11:11	46.90	13.6	56.5	6.66	546.2	6.35	21.14	144.1
G012S Duplicate	2/1/2024	11:14	46.90	13.9	57.0	6.55	546.7	4.78	20.98	146.8
G012S Duplicate	2/1/2024	11:17	46.90	14.0	57.2	6.51	547.1	3.78	21.10	147.5

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Groundwater Sampling Field Forms- Groundwater Quality Parameters
Joppa- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
Equipment Blank 1	2/1/2024	12:00	QA/QC Sample							

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Field Calibration Log(s)
Joppa- 1Q 2024

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 45720 Technician(s): justin colp Date: 1/30/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230830b	4.00	1/30/24 8:06
7.0 Buffer	wc230616f	7.02	1/30/24 8:02
10.0 Buffer	wc231027d	10.02	1/30/24 8:11
LCS/CCV (7.0 Buffer)	wc231207a		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1415	1/30/24 8:19

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	2.1	1/30/24 8:24
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %	Comments
LCS	1/30/24 8:28	16.4	7.02	1,418	2.3			
CCV (Midday)	1/30/24 12:56	17	7.03	1,427	2.7			
CCV	1/30/24 15:10	17.1	7.03	1,435	2.8			

Field Meter ID: Pine 45720 Technician(s): justin colp Date: 1/31/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230830b	4.01	1/31/24 7:49
7.0 Buffer	wc230616f	7.00	1/31/24 7:46
10.0 Buffer	wc231027d	10.01	1/31/24 7:56
LCS/CCV (7.0 Buffer)	wc231207a		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1413	1/31/24 8:01

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	1.89	1/31/24 8:05
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %	Comments
LCS	1/31/24 8:09	14.6	7.01	1,422	1.98			
CCV (Midday)	1/31/24 12:20	15.3	7.02	1,431	2.01			
CCV	1/31/24 15:16	15.9	7.02	1,446	2.09			

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Field Calibration Log(s)
Joppa- 1Q 2024

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 45720 Technician(s): justin colp Date: 2/1/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230830b	4.01	2/1/24 7:55
7.0 Buffer	wc230616f	7.01	2/1/24 7:52
10.0 Buffer	wc231027d	9.99	2/1/24 7:59
LCS/CCV (7.0 Buffer)	wc231207a		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1414	2/1/24 8:03

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	1.99	2/1/24 8:07
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %	Comments
LCS	2/1/24 8:12	13.8	7.02	1,421	2			
CCV (Midday)								
CCV	2/1/24 12:40	16.6	7.03	1,448	2.03			

Field Meter ID: Technician(s): Date:

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer			
7.0 Buffer			
10.0 Buffer			
LCS/CCV (7.0 Buffer)			

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.			

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %	Comments
LCS								
CCV (Midday)								
CCV								

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Field Calibration Log(s)
Joppa- 1Q 2024

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 45600 Technician(s): Tracy Carroll/Danny Crump Date: 1/29/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	1/29/24 12:23
7.0 Buffer	WC230616F	7.00	1/29/24 12:25
10.0 Buffer	WC231027D	10.00	1/29/24 12:31
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1412	1/29/24 12:35

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.23	1/29/24 12:39
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %	Comments
LCS	1/29/24 12:40	17.4	7.08	1,414	0.21			
CCV (Midday)								
CCV	1/29/24 15:42	16.5	7.09	1,419	0.41			

Field Meter ID: Pine 45600 Technician(s): Tracy Carroll/Danny Crump Date: 1/30/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	1/30/24 8:16
7.0 Buffer	WC230616F	7.00	1/30/24 8:20
10.0 Buffer	WC231027D	10.00	1/30/24 8:26
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1412	1/30/24 8:30

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %	Comments
LCS	1/30/24 8:37	6.1	7.10	1,410	0.3			
CCV (Midday)	1/30/24 11:36	10.5	7.08	1,411	0.1			
CCV	1/30/24 14:59	14	7.09	1,344	0.1			

Site Samping Event: Joppa 1Q24
LIMS Workorder: 24010966
Technician(s): DC, JC, TC, BG

Field Calibration Log(s)
Joppa- 1Q 2024

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 45600 Technician(s): Tracy Carroll/Danny Crump Date: 1/31/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	1/31/24 7:53
7.0 Buffer	WC230616F	7.00	1/31/24 7:55
10.0 Buffer	WC231027D	10.00	1/31/24 8:07
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1412	1/31/24 8:11

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0	1/31/24 8:22
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %	Comments
LCS	1/31/24 8:22	6.3	7.09	1,412	0.03			
CCV (Midday)	1/31/24 12:03	12.6	7.09	1,398	0.2			
CCV	1/31/24 15:46	16.8	7.09	1,326	0.1			

Field Meter ID: Technician(s): Date:

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer			
7.0 Buffer			
10.0 Buffer			
LCS/CCV (7.0 Buffer)			

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.			

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %	Comments
LCS								
CCV (Midday)								
CCV								

Teklab, Inc.
Environmental Laboratory
http://www.teklabinc.com/

August 12, 2024

Eric Bauer
Ramboll
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FAX: (414) 837-3608

Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: JOP-24Q3 **WorkOrder:** 24071132

Dear Eric Bauer:

TEKLAB, INC received 8 samples for JOP_257_402 on 7/24/2024 5:20:00 PM for the analysis presented in the following report.

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

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

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

Sincerely,

Elizabeth A. Hurley

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

Report Contents

Client: Ramboll
Work Order: 24071132
Client Project: JOP-24Q3
Report Date: 12-Aug-24

This reporting package includes the following:

Definitions

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

Abbr	Definition
*	Analytes on report marked with an asterisk are not NELAP accredited
CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
CRQL	A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
DNI	Did not ignite
DUP	Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample is a sample matrix, free from the analytes of interest,spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MBLK	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	"The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
NC	Data is not acceptable for compliance purposes
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TIC	Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
TNTC	Too numerous to count (> 200 CFU)

Definitions

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

Qualifiers

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

Case Narrative

Client: Ramboll
Client Project: JOP-24Q3

Work Order: 24071132
Report Date: 12-Aug-24

Cooler Receipt Temp: 6.9 °C

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

SG03 and XSG01 collection date/times per depth files. EAH 7/25/24

G11, G111, G53D, XPW02, and XPW03 collection dates/times per field file. EAH 7/31/24

Per Eric Bauer's request, only JOP_257_402 data is included in this report. EAH 8/12/24

Locations

Collinsville
Address 5445 Horseshoe Lake Road
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Phone (618) 344-1004
Fax (618) 344-1005
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Springfield
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Springfield, IL 62711-9415
Phone (217) 698-1004
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Kansas City
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Lenexa, KS 66214
Phone (913) 541-1998
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Collinsville Air
Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
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Chicago
Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Accreditations

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Illinois	IEPA	1004652024-2	NELAP	4/30/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2025	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2025	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2025	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2025	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2026	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Mississippi	MSDH			4/30/2025	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville

Laboratory Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

Lab ID: 24071132-010 **Client Sample ID:** G101

Matrix: GROUNDWATER **Collection Date:** 07/23/2024 13:19

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**45.89**	ft	1	07/23/2024 13:19	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**120**	NTU	1	07/23/2024 13:19	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**109**	mV	1	07/23/2024 13:19	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**327**	µS/cm	1	07/23/2024 13:19	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**18.4**	°C	1	07/23/2024 13:19	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**6.02**	mg/L	1	07/23/2024 13:19	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		**6.70**		1	07/23/2024 13:19	R351002
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**500**	mg/L	1	07/27/2024 11:47	R350897
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50		**56**	mg/L	5	07/29/2024 18:12	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.39**	mg/L	1	07/25/2024 10:47	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4	J	**3**	mg/L	1	07/30/2024 17:38	R351030
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100	B	**13.0**	mg/L	1	07/25/2024 17:01	226113
Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Boron	NELAP	0.0092	0.025	J	**0.025**	mg/L	5	07/26/2024 11:48	226113

Laboratory Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

Lab ID: 24071132-011 **Client Sample ID:** G102

Matrix: GROUNDWATER **Collection Date:** 07/23/2024 14:18

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**57.51**	ft	1	07/23/2024 14:18	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**22**	NTU	1	07/23/2024 14:18	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**123**	mV	1	07/23/2024 14:18	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**296**	µS/cm	1	07/23/2024 14:18	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**17.5**	°C	1	07/23/2024 14:18	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**6.46**	mg/L	1	07/23/2024 14:18	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		**6.47**		1	07/23/2024 14:18	R351002
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**236**	mg/L	1	07/27/2024 11:48	R350897
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**28**	mg/L	1	07/29/2024 18:33	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.22**	mg/L	1	07/25/2024 10:48	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		**4**	mg/L	1	07/29/2024 18:33	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		**9.70**	mg/L	1	07/29/2024 12:25	226204
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Boron	NELAP	0.0092	0.0250		**< 0.0250**	mg/L	5	07/29/2024 15:59	226204

Laboratory Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

Lab ID: 24071132-012 **Client Sample ID:** G105

Matrix: GROUNDWATER **Collection Date:** 07/24/2024 9:02

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**55.48**	ft	1	07/24/2024 9:02	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**7.8**	NTU	1	07/24/2024 9:02	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**132**	mV	1	07/24/2024 9:02	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**435**	µS/cm	1	07/24/2024 9:02	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**20.2**	°C	1	07/24/2024 9:02	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**7.60**	mg/L	1	07/24/2024 9:02	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		**6.29**		1	07/24/2024 9:02	R351002
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**278**	mg/L	1	07/29/2024 9:36	R350969
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**15**	mg/L	1	07/29/2024 18:41	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.18**	mg/L	1	07/25/2024 10:59	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	2	20		**61**	mg/L	5	07/29/2024 18:46	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		**29.4**	mg/L	1	07/29/2024 12:30	226204
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Boron	NELAP	0.0092	0.0250		**< 0.0250**	mg/L	5	07/29/2024 14:33	226204

Teklab, Inc. Environmental Laboratory

Laboratory Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

Lab ID: 24071132-013 **Client Sample ID:** G107

Matrix: GROUNDWATER **Collection Date:** 07/24/2024 9:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**54.42**	ft	1	07/24/2024 9:40	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**110**	NTU	1	07/24/2024 9:40	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**132**	mV	1	07/24/2024 9:40	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**764**	µS/cm	1	07/24/2024 9:40	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**18.2**	°C	1	07/24/2024 9:40	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**2.45**	mg/L	1	07/24/2024 9:40	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		**6.59**		1	07/24/2024 9:40	R351002
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**574**	mg/L	1	07/29/2024 9:36	R350969
SW-846 9036 (TOTAL)									
Sulfate	NELAP	12	20		**37**	mg/L	2	07/29/2024 19:15	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.20**	mg/L	1	07/25/2024 11:01	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	8		**85**	mg/L	2	07/29/2024 19:16	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		**87.1**	mg/L	1	07/29/2024 12:32	226204
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Boron	NELAP	0.0092	0.0250		**< 0.0250**	mg/L	5	07/29/2024 15:19	226204

Laboratory Results

Teklab, Inc.
Environmental Laboratory
http://www.teklabinc.com/

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

Lab ID: 24071132-014 **Client Sample ID:** G109

Matrix: GROUNDWATER **Collection Date:** 07/23/2024 12:17

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**50.51**	ft	1	07/23/2024 12:17	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**24**	NTU	1	07/23/2024 12:17	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**108**	mV	1	07/23/2024 12:17	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**271**	µS/cm	1	07/23/2024 12:17	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**18.2**	°C	1	07/23/2024 12:17	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**5.65**	mg/L	1	07/23/2024 12:17	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		**6.52**		1	07/23/2024 12:17	R351002
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**196**	mg/L	1	07/27/2024 11:48	R350897
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**24**	mg/L	1	07/29/2024 19:26	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.19**	mg/L	1	07/25/2024 11:03	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		**8**	mg/L	1	07/29/2024 19:26	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100	B	**17.8**	mg/L	1	07/25/2024 17:02	226113
Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Boron	NELAP	0.0092	0.025	J	**0.018**	mg/L	5	07/26/2024 11:55	226113

Laboratory Results

Teklab, Inc.
Environmental Laboratory
http://www.teklabinc.com/

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

Lab ID: 24071132-016 **Client Sample ID:** G111

Matrix: GROUNDWATER **Collection Date:** 07/24/2024 10:34

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**47.65**	ft	1	07/24/2024 10:34	R351002
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**12**	NTU	1	07/24/2024 10:34	R351002
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**140**	mV	1	07/24/2024 10:34	R351002
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**776**	µS/cm	1	07/24/2024 10:34	R351002
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**18.3**	°C	1	07/24/2024 10:34	R351002
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**2.49**	mg/L	1	07/24/2024 10:34	R351002
SW-846 9040B FIELD									
pH	*	0	1.00		**6.08**		1	07/24/2024 10:34	R351002
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**242**	mg/L	1	07/27/2024 11:48	R350897
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**20**	mg/L	1	07/29/2024 19:58	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.28**	mg/L	1	07/25/2024 11:06	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		**8**	mg/L	1	07/29/2024 19:58	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100	B	**14.2**	mg/L	1	07/25/2024 17:04	226113
Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Boron	NELAP	0.0092	0.025	J	**0.018**	mg/L	5	07/26/2024 12:01	226113

Laboratory Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

Lab ID: 24071132-021 **Client Sample ID:** SG03

Matrix: GROUNDWATER **Collection Date:** 07/22/2024 13:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**52.58**	ft	1	07/22/2024 13:00	R351002

Laboratory Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

Lab ID: 24071132-026 **Client Sample ID:** Field Blank

Matrix: AQUEOUS **Collection Date:** 07/24/2024 13:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**< 20**	mg/L	1	07/29/2024 9:48	R350969
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**< 10**	mg/L	1	07/29/2024 21:21	R350922
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10	J	**0.05**	mg/L	1	07/25/2024 11:33	R350762
SW-846 9251 (TOTAL)									
Chloride	NELAP	1	4		**< 4**	mg/L	1	07/29/2024 21:21	R350942
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Calcium	NELAP	0.0350	0.100		**< 0.100**	mg/L	1	07/29/2024 13:01	226204
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Boron	NELAP	0.0092	0.0250		**< 0.0250**	mg/L	5	07/29/2024 16:40	226204

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

Sample Summary

Client: Ramboll
Client Project: JOP-24Q3

Work Order: 24071132
Report Date: 12-Aug-24

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
24071132-010	G101	Groundwater	2	07/23/2024 13:19
24071132-011	G102	Groundwater	2	07/23/2024 14:18
24071132-012	G105	Groundwater	2	07/24/2024 9:02
24071132-013	G107	Groundwater	2	07/24/2024 9:40
24071132-014	G109	Groundwater	2	07/23/2024 12:17
24071132-016	G111	Groundwater	2	07/24/2024 10:34
24071132-021	SG03	Groundwater	1	07/22/2024 13:00
24071132-026	Field Blank	Aqueous	2	07/24/2024 13:20

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

STANDARD METHODS 2510 B FIELD

Batch R351002 **SampType:** LCS Units **µS/cm**
SampID: LCS-1-B

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		**1410**	1412	0	100.1	90	110	07/23/2024

Batch R351002 **SampType:** LCS Units **µS/cm**
SampID: LCS-1-T

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		**1400**	1412	0	99.5	90	110	07/23/2024

Batch R351002 **SampType:** LCS Units **µS/cm**
SampID: LCS-2-B

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		**1420**	1412	0	100.4	90	110	07/24/2024

Batch R351002 **SampType:** LCS Units **µS/cm**
SampID: LCS-2-T

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		**1410**	1412	0	100.1	90	110	07/24/2024

SW-846 9040B FIELD

Batch R351002 **SampType:** LCS Units
SampID: LCS-1-B

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	07/23/2024

Batch R351002 **SampType:** LCS Units
SampID: LCS-1-T

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.08**	7.000	0	101.1	98.57	101.4	07/23/2024

Batch R351002 **SampType:** LCS Units
SampID: LCS-2-B

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.01**	7.000	0	100.1	98.57	101.4	07/24/2024

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

SW-846 9040B FIELD

Batch R351002 **SampType:** LCS Units

SampID: LCS-2-T

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.05**	7.000	0	100.7	98.57	101.4	07/24/2024

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R350897 **SampType:** MBLK Units **mg/L**

SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	07/27/2024

Batch R350897 **SampType:** LCS Units **mg/L**

SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**1020**	1000	0	102.2	90	110	07/27/2024

Batch R350897 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 24071132-027ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		**314**				298.0	5.23	07/27/2024

Batch R350897 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 24071873-001ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		1000		**15600**				16600	6.21	07/27/2024

Batch R350969 **SampType:** MBLK Units **mg/L**

SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	07/29/2024
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	07/29/2024

Batch R350969 **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		**958**	1000	0	95.8	90	110	07/29/2024
Total Dissolved Solids		20		**1000**	1000	0	100.4	90	110	07/29/2024

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R350969 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 24071132-024ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		**444**				450.0	1.34	07/29/2024

Batch R351152 **SampType:** MBLK Units **mg/L**

SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	08/01/2024
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	08/01/2024

Batch R351152 **SampType:** LCS Units **mg/L**

SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**978**	1000	0	97.8	90	110	08/01/2024
Total Dissolved Solids		20		**968**	1000	0	96.8	90	110	08/01/2024

SW-846 9036 (TOTAL)

Batch R350922 **SampType:** MBLK Units **mg/L**

SampID: ICB/MBLK

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	07/29/2024

Batch R350922 **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	94.1	90	110	07/29/2024

Batch R350922 **SampType:** MS Units **mg/L**

SampID: 24061962-008BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		50		**166**	100.0	75.94	89.6	85	115	07/29/2024

Batch R350922 **SampType:** MSD Units **mg/L** RPD Limit **10**

SampID: 24061962-008BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		50		**164**	100.0	75.94	88.3	165.5	0.75	07/29/2024

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

SW-846 9036 (TOTAL)

Batch R350922 **SampType:** MS Units **mg/L**
SampID: 24071132-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		20	S	**75**	40.00	43.29	79.1	85	115	07/29/2024

Batch R350922 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24071132-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		20		**78**	40.00	43.29	86.6	74.94	3.91	07/29/2024

Batch R350922 **SampType:** MS Units **mg/L**
SampID: 24071132-002AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**37**	20.00	16.61	99.6	85	115	07/29/2024

Batch R350922 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24071132-002AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		10		**36**	20.00	16.61	99.2	36.52	0.22	07/29/2024

Batch R350922 **SampType:** MS Units **mg/L**
SampID: 24071132-010AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		50		**141**	100.0	55.92	85.4	85	115	07/29/2024

Batch R350922 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24071132-010AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		50		**145**	100.0	55.92	89.2	141.4	2.59	07/29/2024

Batch R350922 **SampType:** MS Units **mg/L**
SampID: 24071132-013AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		20		**75**	40.00	36.86	95.0	85	115	07/29/2024

Batch R350922 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24071132-013AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		20		**74**	40.00	36.86	92.2	74.84	1.49	07/29/2024

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

SW-846 9036 (TOTAL)

Batch R350922 **SampType:** MS Units **mg/L**
SampID: 24072345-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		200		**720**	400.0	327.6	98.1	90	110	07/29/2024

Batch R350922 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24072345-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		200		**718**	400.0	327.6	97.7	720.0	0.22	07/29/2024

Batch R350922 **SampType:** MS Units **mg/L**
SampID: 24072346-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		200		**725**	400.0	351.0	93.6	90	110	07/29/2024

Batch R350922 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24072346-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		200	S	**709**	400.0	351.0	89.5	725.4	2.28	07/29/2024

Batch R350996 **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	07/30/2024

Batch R350996 **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	93.3	90	110	07/30/2024

Batch R350996 **SampType:** MS Units **mg/L**
SampID: 24071292-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**34**	20.00	16.11	91.2	85	115	07/30/2024

Batch R350996 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24071292-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		10		**36**	20.00	16.11	97.1	34.35	3.38	07/30/2024

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

SW-846 9036 (TOTAL)

Batch R350996 **SampType:** MS Units **mg/L**
SampID: 24072173-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		100		**442**	200.0	260.3	90.7	85	115	07/30/2024

Batch R350996 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24072173-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		100		**452**	200.0	260.3	95.7	441.8	2.24	07/30/2024

Batch R350996 **SampType:** MS Units **mg/L**
SampID: 24072173-006AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		50		**169**	100.0	78.49	90.7	85	115	07/30/2024

Batch R350996 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24072173-006AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		50		**172**	100.0	78.49	93.8	169.2	1.83	07/30/2024

SW-846 9214 (TOTAL)

Batch R350762 **SampType:** MBLK Units **mg/L**
SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**< 0.10**	0.0500	0	0	-100	100	07/25/2024

Batch R350762 **SampType:** LCS Units **mg/L**
SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**1.08**	1.000	0	107.5	90	110	07/25/2024

Batch R350762 **SampType:** MS Units **mg/L**
SampID: 24071132-002AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.25**	2.000	0.1980	102.6	75	125	07/25/2024

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

SW-846 9214 (TOTAL)

Batch R350762 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24071132-002AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.33**	2.000	0.1980	106.5	2.251	3.36	07/25/2024

Batch R350762 **SampType:** MS Units **mg/L**
SampID: 24071132-011AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.35**	2.000	0.2160	106.8	75	125	07/25/2024

Batch R350762 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24071132-011AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.31**	2.000	0.2160	104.8	2.353	1.80	07/25/2024

Batch R350762 **SampType:** MS Units **mg/L**
SampID: 24071132-019AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.88**	2.000	0.7420	107.2	75	125	07/25/2024

Batch R350762 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24071132-019AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.88**	2.000	0.7420	106.7	2.885	0.31	07/25/2024

Batch R350762 **SampType:** MS Units **mg/L**
SampID: 24071292-006AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.11**	2.000	0.06500	102.1	75	125	07/25/2024

Batch R350762 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24071292-006AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.16**	2.000	0.06500	104.8	2.107	2.53	07/25/2024

Batch R350762 **SampType:** MS Units **mg/L**
SampID: 24071292-009AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.08**	2.000	0	103.8	75	125	07/25/2024

Teklab, Inc.
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Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

SW-846 9214 (TOTAL)

Batch R350762 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24071292-009AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.11**	2.000	0	105.4	2.076	1.58	07/25/2024

Batch R350762 **SampType:** MS Units **mg/L**
SampID: 24071895-003BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.88**	2.000	0.7650	105.8	75	125	07/25/2024

Batch R350762 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24071895-003BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.87**	2.000	0.7650	105.3	2.882	0.38	07/25/2024

SW-846 9251 (TOTAL)

Batch R350942 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**< 4**	0.5000	0	0	-100	100	07/29/2024

Batch R350942 **SampType:** LCS Units **mg/L**
SampID: 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	07/29/2024

Batch R350942 **SampType:** MS Units **mg/L**
SampID: 24071132-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**33**	20.00	14.64	91.7	85	115	07/29/2024

Batch R350942 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24071132-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**33**	20.00	14.64	90.4	32.97	0.79	07/29/2024

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Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

SW-846 9251 (TOTAL)

Batch R350942 **SampType:** MS Units **mg/L**
SampID: 24071132-002AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**37**	20.00	19.34	90.2	85	115	07/29/2024

Batch R350942 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24071132-002AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**37**	20.00	19.34	88.4	37.39	0.97	07/29/2024

Batch R350942 **SampType:** MS Units **mg/L**
SampID: 24071132-013AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		8	E	**123**	40.00	84.65	95.8	85	115	07/29/2024

Batch R350942 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24071132-013AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		8	E	**121**	40.00	84.65	91.7	123.0	1.34	07/29/2024

Batch R350942 **SampType:** MS Units **mg/L**
SampID: 24071773-005AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		80		**668**	400.0	315.5	88.1	85	115	07/29/2024

Batch R350942 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24071773-005AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		80		**676**	400.0	315.5	90.0	667.9	1.16	07/29/2024

Batch R350942 **SampType:** MS Units **mg/L**
SampID: 24071875-002AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		40		**363**	200.0	188.6	87.3	85	115	07/29/2024

Batch R350942 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24071875-002AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		40		**364**	200.0	188.6	87.5	363.1	0.13	07/29/2024

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Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

SW-846 9251 (TOTAL)

Batch R350942 **SampType:** MS Units **mg/L**
SampID: 24072346-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**27**	20.00	8.420	95.0	85	115	07/29/2024

Batch R350942 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24072346-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**27**	20.00	8.420	95.2	27.41	0.15	07/29/2024

Batch R351030 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**< 4**	0.5000	0	0	-100	100	07/30/2024

Batch R351030 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**20**	20.00	0	97.8	90	110	07/30/2024

Batch R351030 **SampType:** MS Units **mg/L**
SampID: 24071132-010AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**22**	20.00	2.870	97.0	85	115	07/30/2024

Batch R351030 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24071132-010AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**22**	20.00	2.870	96.5	22.27	0.50	07/30/2024

Batch R351030 **SampType:** MS Units **mg/L**
SampID: 24071292-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**36**	20.00	18.52	88.0	85	115	07/30/2024

Batch R351030 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24071292-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**37**	20.00	18.52	90.0	36.12	1.07	07/30/2024

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

SW-846 9251 (TOTAL)

Batch R351030 **SampType:** MS Units **mg/L**
SampID: 24072147-003BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		40	E	**686**	200.0	486.4	100.0	85	115	07/30/2024

Batch R351030 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24072147-003BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		40	E	**695**	200.0	486.4	104.1	686.4	1.18	07/30/2024

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

Batch 226113 **SampType:** MBLK Units **mg/L**
SampID: MBLK-226113

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	JS	**0.086**	0.0350	0	246.9	-100	100	07/25/2024
Magnesium		0.0500		**< 0.0500**	0.0055	0	0	-100	100	07/25/2024
Potassium		0.100		**< 0.100**	0.0400	0	0	-100	100	07/25/2024
Sodium		0.0500		**< 0.0500**	0.0180	0	0	-100	100	07/25/2024

Batch 226113 **SampType:** LCS Units **mg/L**
SampID: LCS-226113

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	B	**2.50**	2.500	0	99.8	85	115	07/25/2024
Magnesium		0.0500		**2.36**	2.500	0	94.4	85	115	07/25/2024
Potassium		0.100		**2.57**	2.500	0	102.8	85	115	07/25/2024
Sodium		0.0500		**2.46**	2.500	0	98.4	85	115	07/25/2024

Batch 226204 **SampType:** MBLK Units **mg/L**
SampID: MBLK-226204

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		**< 0.100**	0.0350	0	0	-100	100	07/29/2024
Magnesium		0.0500		**< 0.0500**	0.0055	0	0	-100	100	07/29/2024
Potassium		0.100		**< 0.100**	0.0400	0	0	-100	100	07/29/2024
Sodium		0.0500		**< 0.0500**	0.0180	0	0	-100	100	07/29/2024

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

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

Batch 226204 **SampType:** LCS Units **mg/L**
SampID: LCS-226204

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		**2.65**	2.500	0	106.1	85	115	07/29/2024
Magnesium		0.0500		**2.52**	2.500	0	100.8	85	115	07/29/2024
Potassium		0.100		**2.84**	2.500	0	113.4	85	115	07/29/2024
Sodium		0.0500		**2.63**	2.500	0	105.3	85	115	07/29/2024

Batch 226204 **SampType:** MS Units **mg/L**
SampID: 24071132-011BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		**12.4**	2.500	9.700	106.8	75	125	07/29/2024

Batch 226204 **SampType:** MSD Units **mg/L** RPD Limit **20**
SampID: 24071132-011BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100		**12.1**	2.500	9.700	95.2	12.37	2.37	07/29/2024

Batch 226569 **SampType:** MBLK Units **mg/L**
SampID: MBLK-226569

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0500		**< 0.0500**	0.0068	0	0	-100	100	08/05/2024
Arsenic		0.0250		**< 0.0250**	0.0087	0	0	-100	100	08/05/2024
Barium		0.0025		**< 0.0025**	0.0007	0	0	-100	100	08/05/2024
Beryllium		0.0005		**< 0.0005**	0.0002	0	0	-100	100	08/05/2024
Boron		0.0200		**< 0.0200**	0.0090	0	0	-100	100	08/05/2024
Cadmium		0.0020		**< 0.0020**	0.0005	0	0	-100	100	08/05/2024
Calcium		0.100		**< 0.100**	0.0350	0	0	-100	100	08/05/2024
Chromium		0.0050		**< 0.0050**	0.0028	0	0	-100	100	08/05/2024
Cobalt		0.0050		**< 0.0050**	0.0020	0	0	-100	100	08/05/2024
Lead		0.0150		**< 0.0150**	0.0014	0	0	-100	100	08/05/2024
Lithium		0.0500		**< 0.0500**	0.0019	0	0	-100	100	08/05/2024
Magnesium		0.0500		**< 0.0500**	0.0055	0	0	-100	100	08/05/2024
Molybdenum		0.0100		**< 0.0100**	0.0037	0	0	-100	100	08/05/2024
Potassium		0.100		**< 0.100**	0.0400	0	0	-100	100	08/05/2024
Selenium		0.0400		**< 0.0400**	0.0170	0	0	-100	100	08/05/2024
Sodium		0.0500		**< 0.0500**	0.0180	0	0	-100	100	08/05/2024
Thallium		0.0500		**< 0.0500**	0.0111	0	0	-100	100	08/05/2024

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

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

Batch 226569 **SampType:** LCS Units **mg/L**

SampID: LCS-226569

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0500		**0.564**	0.5000	0	112.7	85	115	08/05/2024
Arsenic		0.0250		**0.557**	0.5000	0	111.3	85	115	08/05/2024
Barium		0.0025		**2.21**	2.000	0	110.5	85	115	08/05/2024
Beryllium		0.0005		**0.0572**	0.0500	0	114.4	85	115	08/05/2024
Boron		0.0200		**0.539**	0.5000	0	107.8	85	115	08/05/2024
Cadmium		0.0020		**0.0565**	0.0500	0	113.0	85	115	08/05/2024
Calcium		0.100		**2.76**	2.500	0	110.5	85	115	08/05/2024
Chromium		0.0050		**0.225**	0.2000	0	112.4	85	115	08/05/2024
Cobalt		0.0050		**0.535**	0.5000	0	107.1	85	115	08/06/2024
Lead		0.0150		**0.563**	0.5000	0	112.7	85	115	08/05/2024
Lithium		0.0500		**0.544**	0.5000	0	108.7	85	115	08/05/2024
Magnesium		0.0500		**2.60**	2.500	0	104.1	85	115	08/05/2024
Molybdenum		0.0100		**0.545**	0.5000	0	109.1	85	115	08/05/2024
Potassium		0.100		**2.76**	2.500	0	110.3	85	115	08/05/2024
Selenium		0.0400		**0.565**	0.5000	0	112.9	85	115	08/05/2024
Sodium		0.0500		**2.75**	2.500	0	110.2	85	115	08/05/2024
Thallium		0.0500		**0.279**	0.2500	0	111.6	85	115	08/05/2024

Batch 226569 **SampType:** MS Units **mg/L**

SampID: 24071451-035CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	**61.9**	2.500	56.00	234.8	75	125	08/05/2024
Magnesium		0.050	S	**31.2**	2.500	26.92	169.2	75	125	08/05/2024
Potassium		0.100		**3.38**	2.500	0.5302	114.1	75	125	08/05/2024
Sodium		0.050	S	**68.5**	2.500	63.24	209.2	75	125	08/05/2024

Batch 226569 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24071451-035CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100	S	**60.3**	2.500	56.00	172.4	61.87	2.55	08/05/2024
Magnesium		0.050	S	**30.2**	2.500	26.92	132.2	31.15	3.02	08/05/2024
Potassium		0.100		**3.29**	2.500	0.5302	110.4	3.384	2.79	08/05/2024
Sodium		0.050	S	**66.6**	2.500	63.24	136.0	68.47	2.71	08/05/2024

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

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

Batch 226569 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24080007-001FMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Arsenic		0.0250		**0.569**	0.5000	0	113.7	0.5489	3.53	08/05/2024
Barium		0.0025		**2.35**	2.000	0.1302	111.0	2.240	4.79	08/05/2024
Beryllium		0.0005		**0.0580**	0.0500	0	116.0	0.05550	4.41	08/05/2024
Boron		0.0200		**0.754**	0.5000	0.1984	111.1	0.7218	4.32	08/05/2024
Cadmium		0.0020		**0.0555**	0.0500	0	111.0	0.05300	4.61	08/05/2024
Chromium		0.0050		**0.229**	0.2000	0	114.5	0.2192	4.37	08/05/2024
Cobalt		0.0050		**0.581**	0.5000	0	116.2	0.5586	3.93	08/05/2024
Lead		0.0150		**0.557**	0.5000	0	111.3	0.5358	3.83	08/05/2024
Selenium		0.0400		**0.560**	0.5000	0	112.1	0.5461	2.58	08/05/2024

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

Batch 226113 **SampType:** MBLK Units **mg/L**

SampID: MBLK-226113

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**< 0.0010**	0.0004	0	0	-100	100	07/26/2024
Antimony		0.0010	S	**0.0011**	0.0004	0	248.5	-100	100	07/25/2024
Arsenic		0.0010		**< 0.0010**	0.0004	0	0	-100	100	07/25/2024
Barium		0.0010		**< 0.0010**	0.0007	0	0	-100	100	07/25/2024
Beryllium		0.0010		**< 0.0010**	0.0002	0	0	-100	100	07/25/2024
Boron	*	0.0250		**< 0.0250**	0.0093	0	0	-100	100	07/25/2024
Cadmium	*	0.0010		**< 0.0010**	0.0001	0	0	-100	100	07/25/2024
Chromium		0.0015		**< 0.0015**	0.0007	0	0	-100	100	07/25/2024
Cobalt		0.0010		**< 0.0010**	0.0001	0	0	-100	100	07/25/2024
Lead		0.0010		**< 0.0010**	0.0006	0	0	-100	100	07/25/2024
Lithium	*	0.0030		**< 0.0030**	0.0015	0	0	-100	100	07/25/2024
Molybdenum		0.0015		**< 0.0015**	0.0006	0	0	-100	100	07/25/2024
Selenium		0.0010		**< 0.0010**	0.0006	0	0	-100	100	07/25/2024
Thallium		0.0020		**< 0.0020**	0.0010	0	0	-100	100	07/25/2024

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

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

Batch 226113 **SampType:** LCS Units **mg/L**

SampID: LCS-226113

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010	B	**0.547**	0.5000	0	109.3	85	115	07/25/2024
Arsenic		0.0010		**0.515**	0.5000	0	102.9	85	115	07/25/2024
Barium		0.0010		**2.11**	2.000	0	105.4	85	115	07/25/2024
Beryllium		0.0010		**0.0486**	0.0500	0	97.1	85	115	07/25/2024
Boron	*	0.0250		**0.516**	0.5000	0	103.2	85	115	07/25/2024
Cadmium	*	0.0010		**0.0504**	0.0500	0	100.7	85	115	07/25/2024
Chromium		0.0015		**0.211**	0.2000	0	105.6	85	115	07/25/2024
Cobalt		0.0010		**0.506**	0.5000	0	101.2	85	115	07/25/2024
Lead		0.0010	E	**0.505**	0.5000	0	101.0	85	115	07/25/2024
Lithium	*	0.0030		**0.515**	0.5000	0	103.0	85	115	07/25/2024
Molybdenum		0.0015		**0.462**	0.5000	0	92.4	85	115	07/25/2024
Selenium		0.0010		**0.539**	0.5000	0	107.9	85	115	07/25/2024
Thallium		0.0020		**0.237**	0.2500	0	94.9	85	115	07/25/2024

Batch 226204 **SampType:** MBLK Units **mg/L**

SampID: MBLK-226204

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**< 0.0010**	0.0004	0	0	-100	100	07/26/2024
Arsenic		0.0010		**< 0.0010**	0.0004	0	0	-100	100	07/26/2024
Barium		0.0010		**< 0.0010**	0.0007	0	0	-100	100	07/26/2024
Beryllium		0.0010		**< 0.0010**	0.0002	0	0	-100	100	07/26/2024
Boron		0.0250		**< 0.0250**	0.0093	0	0	-100	100	07/29/2024
Cadmium	*	0.0010		**< 0.0010**	0.0001	0	0	-100	100	07/26/2024
Chromium		0.0015		**< 0.0015**	0.0007	0	0	-100	100	07/26/2024
Cobalt		0.0010		**< 0.0010**	0.0001	0	0	-100	100	07/26/2024
Lead		0.0010		**< 0.0010**	0.0006	0	0	-100	100	07/29/2024
Lithium	*	0.0030		**< 0.0030**	0.0015	0	0	-100	100	07/26/2024
Molybdenum		0.0015		**< 0.0015**	0.0006	0	0	-100	100	07/26/2024
Selenium		0.0010		**< 0.0010**	0.0006	0	0	-100	100	07/26/2024
Thallium		0.0020		**< 0.0020**	0.0010	0	0	-100	100	07/26/2024

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

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

Batch 226204 **SampType:** LCS Units **mg/L**

SampID: LCS-226204

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**0.556**	0.5000	0	111.1	80	120	07/26/2024
Arsenic		0.0010		**0.562**	0.5000	0	112.4	80	120	07/26/2024
Barium		0.0010		**2.19**	2.000	0	109.5	80	120	07/26/2024
Beryllium		0.0010		**0.0528**	0.0500	0	105.6	80	120	07/26/2024
Boron		0.0250		**0.514**	0.5000	0	102.8	80	120	07/29/2024
Cadmium	*	0.0010		**0.0541**	0.0500	0	108.2	80	120	07/26/2024
Chromium		0.0015		**0.219**	0.2000	0	109.7	80	120	07/26/2024
Cobalt		0.0010		**0.562**	0.5000	0	112.3	80	120	07/26/2024
Lead		0.0010		**0.567**	0.5000	0	113.4	80	120	07/29/2024
Lithium	*	0.0030		**0.534**	0.5000	0	106.9	80	120	07/26/2024
Molybdenum		0.0015		**0.508**	0.5000	0	101.5	80	120	07/26/2024
Selenium		0.0010		**0.569**	0.5000	0	113.7	80	120	07/26/2024
Thallium		0.0020		**0.264**	0.2500	0	105.5	80	120	07/26/2024

Batch 226204 **SampType:** MS Units **mg/L**

SampID: 24071132-011BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Boron		0.0250		**0.575**	0.5000	0	115.1	75	125	07/29/2024

Batch 226204 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24071132-011BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Boron		0.0250		**0.604**	0.5000	0	120.7	0.5753	4.81	07/29/2024

Batch 226569 **SampType:** MS Units **mg/L**

SampID: 24080007-001FMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**0.544**	0.5000	0	108.8	75	125	08/06/2024
Thallium		0.0020		**0.206**	0.2500	0	82.5	75	125	08/06/2024

Batch 226569 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24080007-001FMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		**0.550**	0.5000	0	110.0	0.5440	1.09	08/06/2024
Thallium		0.0020		**0.217**	0.2500	0	86.8	0.2062	5.13	08/06/2024

Teklab, Inc. Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

SW-846 7470A (TOTAL)

Batch 226132 **SampType:** MBLK Units **mg/L**
SampID: MBLK-226132

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**< 0.00020**	0.0001	0	0	-100	100	07/29/2024
Mercury		0.00020		**< 0.00020**	0.0001	0	0	-100	100	07/26/2024

Batch 226132 **SampType:** LCS Units **mg/L**
SampID: LCS-226132

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00469**	0.0050	0	93.8	85	115	07/26/2024
Mercury		0.00020		**0.00561**	0.0050	0	112.1	85	115	07/29/2024

Batch 226132 **SampType:** MS Units **mg/L**
SampID: 24071862-001BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00557**	0.0050	0	111.5	75	125	07/29/2024

Batch 226132 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24071862-001BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00551**	0.0050	0	110.2	0.005574	1.19	07/29/2024

Batch 226132 **SampType:** MS Units **mg/L**
SampID: 24071896-003DMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00507**	0.0050	0	101.4	75	125	07/26/2024

Batch 226132 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24071896-003DMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00514**	0.0050	0	102.8	0.005069	1.35	07/26/2024

Batch 226214 **SampType:** MBLK Units **mg/L**
SampID: MBLK-226214

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**< 0.00020**	0.0001	0	0	-100	100	07/26/2024
Mercury		0.00020		**< 0.00020**	0.0001	0	0	-100	100	07/29/2024

Teklab, Inc.
Environmental Laboratory

Quality Control Results

Client: Ramboll **Work Order:** 24071132

Client Project: JOP-24Q3 **Report Date:** 12-Aug-24

SW-846 7470A (TOTAL)

Batch 226214 **SampType:** LCS Units **mg/L**
SampID: LCS-226214

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00569**	0.0050	0	113.8	85	115	07/29/2024
Mercury		0.00020		**0.00477**	0.0050	0	95.3	85	115	07/26/2024

Batch 226214 **SampType:** MS Units **mg/L**
SampID: 24071132-009BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00471**	0.0050	0	94.2	75	125	07/26/2024

Batch 226214 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24071132-009BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00472**	0.0050	0	94.4	0.004712	0.14	07/26/2024

Batch 226214 **SampType:** MS Units **mg/L**
SampID: 24072081-003DMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00524**	0.0050	0	104.8	75	125	07/26/2024

Batch 226214 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24072081-003DMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00529**	0.0050	0	105.8	0.005240	0.93	07/26/2024

Teklab, Inc.
Environmental Laboratory

Receiving Check List

Client: Ramboll
Client Project: JOP-24Q3

Work Order: 24071132
Report Date: 12-Aug-24

Carrier: Daniel Crump
Received By: AMD

Completed by: Amber Dilallo
On: 23-Jul-24

Reviewed by: Ellie Hopkins
On: 25-Jul-24

Pages to follow: Chain of custody 4 Extra pages included 0

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C 6.9
Type of thermal preservation?	None ☐	Ice ☑	Blue Ice ☐	Dry Ice ☐
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☐	No ☑		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Reported field parameters measured:	Field ☑	Lab ☐	NA ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐		

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

Water – at least one vial per sample has zero headspace?	Yes ☐	No ☐	No VOA vials ☑
Water - TOX containers have zero headspace?	Yes ☐	No ☐	No TOX containers ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☑	NA ☐
NPDES/CWA TCN interferences checked/treated in the field?	Yes ☐	No ☐	NA ☑

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

Samples were received on 7/23/24 at 1615 on ice [6.9C - LTG5]. pH strip #96651. G111 was submitted/received rather than G11 per Brett Gillihan. - amberdilallo - 7/23/2024 4:54:15 PM

Samples were received on 7/24/2024 at 17:20 on ice [2.7C - LTG#5]. - pschultz - 7/25/2024 8:32:52 AM

pH strip #96651. - pschultz - 7/25/2024 8:34:15 AM

Additional Nitric Acid (98584) was needed in G107 upon arrival at the laboratory. - NO/pschultz - 7/25/2024 8:34:21 AM

G11 was collected/submitted on 7/24/24 rather than G109. Collection date and time listed on the COC for G109 will be reported for G11. - PS 7/25/2024

24071132

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 of 2

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

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

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Valid Matrix Codes: 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 DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N ⇒ / ⇓ Analysis Test	JOP_257_401	JOP_257_402	JOP_845_401	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	G01D		WT	G	7.23.24	938		2	1		1						X		X		24071132-001
2	G02D		WT	G	7.23.24	1038		2	1		1						X		X		24071132-002
3	G03		WT	G	7.23.24	1137		2	1		1						X		X		24071132-003
4	G05		WT	G				2	1		1						X		X		24071132-004
5	G06		WT	G				2	1		1						X		X		24071132-005
6	G07		WT	G				2	1		1						X		X		24071132-006
7	G08		WT	G				2	1		1						X		X		24071132-007
8	G09		WT	G	7-23-24	1035		2	1		1						X		X		24071132-008
9	G10		WT	G				2	1		1						X		X		24071132-009
10	G101		WT	G	7-23-24	1319		2	1		1							X			24071132-010
11	G102		WT	G				2	1		1							X			24071132-011
12	G105		WT	G				2	1		1							X			24071132-012
13	G107		WT	G				2	1		1							X			24071132-013
14	G109		WT	G	7-23-24	1217		2	1		1							X			24071132-014
15	G11		WT	G	7-23-24	1132 TE*		2	1		1						X		X		24071132-015
16	G111		WT	G	7/23/24	1132 (DM)		2	1		1							X			24071132-016

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
JOP-24Q3 Rev 0		7-23	1615		7/23/24	1615		Y	N	
							6.9	Y	N	Y

SAMPLER NAME AND SIGNATURE		
PRINT Name of SAMPLER:	Daniel Crump	
SIGNATURE of SAMPLER:		DATE Signed (MM/DD/YY): 7-23-24 1400

*per Brett Gillman. DM 7/24/24

LTE 5 on ice

PM 96657 24 7/28/24

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24071132

CHAIN-OF-CUSTODY / Analytical Request Document

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

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

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	JOP_257_401	JOP_257_402	JOP_845_401	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	G51D	WT	G	7.23.24	1235		2	1		1							X		X		24071132-017
2	G52D	WT	G	7-23-24	9:26		2	1		1							X		X		24071132-018
3	G53D	WT	G				2	1		1							X		X		24071132-019
4	G54D	WT	G				2	1		1							X		X		24071132-020
5	SG03	WT	G				0										X	X	X		24071132-021
6	XPW01	WT	G				2	1		1							X		X		24071132-022
7	XPW02	WT	G				2	1		1							X		X		24071132-023
8	XPW03	WT	G				2	1		1							X		X		24071132-024
9	XSG01	WT	G				0										X		X		24071132-025
10	Field Blank	WT	G				2	1		1							X	X	X		24071132-026
11	G52D Duplicate	WT	G	7-23	9:26		2	1		1							X		X		24071132-027
12																					
13																					
14																					
15																					
16																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
JOP-24Q3 Rev 0		7-23	1615		7/23/24	1615

SAMPLE CONDITIONS	Y	N	
Temp in °C			
Received on Ice (Y/N)			
Custody Sealed Cooler (Y/N)			
Samples Intact (Y/N)			

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER:	Daniel Crump	DATE Signed (MM/DD/YY):	7-23/1400
SIGNATURE of SAMPLER:			

24071132

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 of 2

Section A Required Client Information:

Company:	Vistra Corp-Joppa
Address:	2100 Portland Road, Joppa, IL 62953
Email To:	Brian.Voelker@VistraCorp.com
Phone:	(217) 753-8911
Fax:	
Requested Due Date/TAT:	10 day

Section B Required Project Information:

Report To:	Brian Voelker
Copy To:	Sam Davies: samantha.davies@vistracorp.com; Roger Faughn roger.faughn@vistracorp.com
Purchase Order No.:	
Project Name:	
Project Number:	

Section C Invoice Information:

Attention:	Brian Voelker
Company Name:	Vistra Corp
Address:	see Section A
Quote Reference:	
Project Manager:	
Profile #:	

REGULATORY AGENCY

NPDES | **GROUND WATER** | DRINKING WATER
UST | RCRA | OTHER

Site Location STATE: IL

Section D Required Client Information

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test	JOP_257_401	JOP_257_402	JOP_845_401	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	G01D	WT	G				2	1		1							X		X		24071132-001
2	G02D	WT	G	~~7-23-24~~	~~1418~~		2	1		1							X		X		24071132-002
3	G03	WT	G				2	1		1							X		X		24071132-003
4	G05	WT	G	7.24.24	1143		2	1		1							X		X		24071132-004
5	G06	WT	G	7.24.24	1053		2	1		1							X		X		24071132-005
6	G07	WT	G	7.24.24	948		2	1		1							X		X		24071132-006
7	G08	WT	G	7.24.24	1328		2	1		1							X		X		24071132-007
8	G09	WT	G				2	1		1							X		X		24071132-008
9	G10	WT	G	7-24-24	1246		2	1		1							X		X		24071132-009
10	G101	WT	G				2	1		1								X			24071132-010
11	G102	WT	G	7-23-24	1418		2	1		1								X			24071132-011
12	G105	WT	G	7-24-24	902		2	1		1								X			24071132-012
13	G107	WT	G	7-24-24	9:40		2	1		1								X			24071132-013
14	G109 *	WT	G	7-24-24	1034		2	1		1								X			24071132-014
15	G11 *	WT	G				2	1		1							X		X		24071132-015
16	G111	WT	G				2	1		1								X			24071132-016

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
JOP-24Q3 Rev 0	Tracy Carroll	7.24.24	1720	Paul [signature]	7/24/24	1720	2.7 IG5	Y	N	
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*G11 was sampled, not G109. PS 7/25

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tracy Carroll

SIGNATURE of SAMPLER: Tracy Carroll

DATE Signed (MM/DD/YY): 7-24-24

ph/ 9(0)051

Added HNO3 (98584) to G107 NO 7/25

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 of 2

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

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TS

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	JOP_257_401	JOP_257_402	JOP_845_401	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	G51D	WT	G				2	1		1							X		X		24071132-017
2	G52D	WT	G				2	1		1							X		X		24071132-018
3	G53D	WT	G	7.24.24	1239		2	1		1							X		X		24071132-019
4	G54D	WT	G	7.23.24	1358		2	1		1							X		X		24071132-020
5	SG03	WT	G				0										X	X	X		24071132-021
6	XPW01	WT	G	7-21-24	1106		2	1		1							X		X		24071132-022
7	XPW02	WT	G	7-24-24	1134		2	1		1							X		X		24071132-023
8	XPW03	WT	G	7-24-24	1204		2	1		1							X		X		24071132-024
9	XSG01	WT	G				0										X		X		24071132-025
10	Field Blank	WT	G	7-24-24	1320		2	1		1							X	X	X		24071132-026
11	G52D Duplicate	WT	G				2	1		1							X		X		24071132-027
12																					
13																					
14																					
15																					
16																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	Y	N	
JOP-24Q3 Rev 0	Tracy Farrell	7.24.24	1720	Paul Eddy	7/24/24	1720				
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tracy Farrell

SIGNATURE of SAMPLER: Tracy Farrell DATE Signed (MM/DD/YY): 7.24.24

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Summary
Joppa- 3Q 2024

			Weather				Well Condition				
WO Sample	**Well ID**	**Program/ Sample Type**	**Temp (°F)**	**Precipitation**	**Wind Direction**	**Sky**	**Well Pad**	**Casing**	**Protective Cover**	**Reference Mark/ ID**	**Well Locked**
001	G01D	Groundwater Sample	76.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
002	G02D	Groundwater Sample	76.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
003	G03	Groundwater Sample	76.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
004	G05	Groundwater Sample	77.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
005	G06	Groundwater Sample	77.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
006	G07	Groundwater Sample	75.0	None	N	Cloudy	Good	Good	Good	Yes	Yes
007	G08	Groundwater Sample	78.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
008	G09	Groundwater Sample	79.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
009	G10	Groundwater Sample	84.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
010	G101	Groundwater Sample	83.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
011	G102	Groundwater Sample	83.0	None	N	Cloudy	Good	Good	Good	Yes	Yes
012	G105	Groundwater Sample	76.0	None	N	Cloudy	Good	Good	Good	Yes	Yes
013	G107	Groundwater Sample	78.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
014	G109	Groundwater Sample	82.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
015	G11	Groundwater Sample	81.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
016	G111	Groundwater Sample	79.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
017	G51D	Groundwater Sample	76.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
018	G52D	Groundwater Sample	76.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
019	G53D	Groundwater Sample	78.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
020	G54D	Groundwater Sample	76.0	Light	N	Cloudy	Good	Good	Good	Yes	Yes
021	SG03	DTW Only	82.0	None	NW	Partly cloudy					
022	XPW01	Leachate Sample	81.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes
023	XPW02	Leachate Sample	82.0	None	N	Clear	Good	Good	Good	Yes	Yes
024	XPW03	Leachate Sample	81.0	None	N	Clear	Good	Good	Good	Yes	Yes
025	XSG01	DTW Only	82.0	None	NW	Partly cloudy					
026	Field Blank	QA/QC Sample	82.0	None	N	Clear					
027	G52D Duplicate	QA/QC Sample	76.0	None	N	Partly cloudy	Good	Good	Good	Yes	Yes

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Summary
Joppa- 3Q 2024

		GW Level Measurement				Purge Activities							
WO Sample	**Well ID**	**Sampler Initials**	**Date/Time**	**DTW (ft)**	**DTB (ft)**	**Sampler Initials**	**Purge Date**	**Purge Start Time**	**Purge End Time**	**Purging/Sampling Device**	**Well Diameter (in)**	**Actual Volume Purged (L)**	**Purge Rate (mL/min)**
001	G01D	TAC	7/23/24 8:53	42.90	67.10	TAC	7/23/2024	09:03	09:38	Bladder Pump	2"	6.5	185.7
002	G02D	TAC	7/23/24 10:17	43.22	75.20	TAC	7/23/2024	10:17	10:38	Bladder Pump	2"	4.0	190.5
003	G03	TAC	7/23/24 11:15	38.22	68.03	TAC	7/23/2024	11:15	11:37	Bladder Pump	2"	5.0	227.3
004	G05	TAC	7/24/24 11:16	43.27	62.92	TAC	7/24/2024	11:16	11:43	Bladder Pump	2"	5.0	185.2
005	G06	TAC	7/24/24 10:10	40.42	62.76	TAC	7/24/2024	10:10	10:53	Bladder Pump	2"	10.0	232.6
006	G07	TAC	7/24/24 8:32	40.55	87.64	TAC	7/24/2024	09:19	09:48	Bladder Pump	2"	9.0	310.3
007	G08	TAC	7/24/24 13:06	32.83	86.82	TAC	7/24/2024	13:06	13:28	Bladder Pump	2"	4.5	204.5
008	G09	BG	7/23/24 9:57	40.61	72.51	BG	7/23/2024	09:57	10:35	Bladder Pump	2"	4.5	118.4
009	G10	BG	7/24/24 12:14	41.03	73.04	BG	7/24/2024	12:24	12:46	Bladder Pump	2"	8.0	363.6
010	G101	BG	7/23/24 12:30	45.89	58.00	BG	7/23/2024	12:30	13:19	Bladder Pump	2"	6.0	122.4
011	G102	BG	7/23/24 13:47	57.51	70.70	BG	7/23/2024	13:47	14:18	Bladder Pump	2"	7.0	225.8
012	G105	BG	7/24/24 8:37	55.48	70.90	BG	7/24/2024	08:37	09:02	Bladder Pump	2"	4.5	180.0
013	G107	BG	7/24/24 9:13	54.42	71.00	BG	7/24/2024	09:13	09:40	Submersible Pump	2"	8.0	296.3
014	G109	BG	7/23/24 11:44	50.51	68.50	BG	7.23.24	11:44	12:17	Bladder Pump	2"	5.0	151.5
015	G11	BG	7/23/24 11:04	49.24	68.90	BG	7/23/2024	11:04	11:32	Bladder Pump	2"	6.0	214.3
016	G111	BG	7/24/24 10:10	47.65	70.90	BG	7/24/2024	10:10	10:34	Bladder Pump	2"	3.5	145.8
017	G51D	TAC	7/23/24 12:05	44.19	62.70	TAC	7/23/2024	12:05	12:35	Bladder Pump	2"	5.3	175.0
018	G52D	BG	7/23/24 8:57	25.77	82.50	BG	7/23/2024	08:57	09:26	Bladder Pump	2"	5.0	172.4
019	G53D	TAC	7/24/24 12:11	37.09	60.60	TAC	7/24/2024	12:11	12:38	Bladder Pump	2"	5.0	185.2
020	G54D	TAC	7/23/24 13:33	43.00	83.50	TAC	7/23/2024	13:34	13:58	Bladder Pump	2"	5.0	208.3
021	SG03	BG	7/22/24 13:00	52.58	-								
022	XPW01	BG	7/24/24 10:48	14.72	56.31	BG	7/24/2024	10:48	11:06	Bladder Pump	2"	3.5	194.4
023	XPW02	BG	7/24/24 11:50	3.36	32.52	BG	7/24/2024	11:50	12:04	Bladder Pump	2"	3.0	214.3
024	XPW03	BG	7/24/24 11:19	12.83	39.57	BG	7/24/2024	11:19	11:34	Bladder Pump	2"	3.0	200.0
025	XSG01	BG	7/22/24 14:08	1.99	-								
026	Field Blank		-	-	-								
027	G52D Duplicate	BG	7/23/24 8:57	25.77	82.50	BG	7/23/2024	08:57	09:26	Bladder Pump	2"	5.0	172.4

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Summary
Joppa- 3Q 2024

WO Sample	Well ID	Sampling Activities and Observations										
		Sampler Initials	Date	Time	Sampling Method	Instrument ID	Field Filtered	Appearance	Odor	Color	Post-Sample DTW (ft)	Drawdown (ft)
001	G01D	TAC	07/23/24	09:38	Low Flow	218083	No	Clear	None	None	43.20	0.30
002	G02D	TAC	07/23/24	10:38	Low Flow	218083	No	Clear	None	None	43.25	0.03
003	G03	TAC	07/23/24	11:37	Low Flow	218083	No	Clear	None	LT Rust	38.22	0.00
004	G05	TAC	07/24/24	11:43	Low Flow	218083	No	Clear	None	None	45.88	2.61
005	G06	TAC	07/24/24	10:53	Low Flow	218083	No	Clear	None	lt brown	40.52	0.10
006	G07	TAC	07/24/24	09:48	Low Flow	218083	No	Slightly cloudy	None	None	40.55	0.00
007	G08	TAC	07/24/24	13:28	Low Flow	218083	No	Clear	None	None	32.94	0.11
008	G09	BG	07/23/24	10:35	Low Flow	45720	No	Slightly cloudy	None	Lt Brown	41.32	0.71
009	G10	BG	07/24/24	12:46	Low Flow	45720	No	Slightly cloudy	Slight	Lt Brown	41.98	0.95
010	G101	BG	07/23/24	13:19	Low Flow	45720	No	Cloudy	None	Lt Brown	46.21	0.32
011	G102	BG	07/23/24	14:18	Low Flow	45720	No	Cloudy	None	none	58.10	0.59
012	G105	BG	07/24/24	09:02	Low Flow	45720	No	Clear	None	CLEAR	56.32	0.84
013	G107	BG	07/24/24	09:40	Low Flow	45720	No	Cloudy	None	Lt Brown	56.12	1.70
014	G109	BG	07/23/24	12:17	Low Flow	45720	No	Slightly cloudy	None	none	51.97	1.46
015	G11	BG	07/23/24	11:32	Low Flow	45720	No	Slightly cloudy	None	none	49.61	0.37
016	G111	BG	07/24/24	10:34	Low Flow	45720	No	Clear	None	CLEAR	47.98	0.33
017	G51D	TAC	07/23/24	12:35	Low Flow	218083	No	Clear	None	None	44.40	0.21
018	G52D	BG	07/23/24	09:26	Low Flow	45720	No	Clear	None	clear	26.17	0.40
019	G53D	TAC	07/24/24	12:39	Low Flow	218083	No	Clear	None	None	37.15	0.06
020	G54D	TAC	07/23/24	13:58	Low Flow	218083	No	Clear	None	None	43.06	0.06
021	SG03											
022	XPW01	BG	07/24/24	11:06	Low Flow	45720	No	Clear	None	CLEAR	15.02	0.30
023	XPW02	BG	07/24/24	12:04	Low Flow	45720	No	Clear	Slight	CLEAR	3.99	0.63
024	XPW03	BG	07/24/24	11:34	Low Flow	45720	No	Clear	None	CLEAR	13.23	0.40
025	XSG01											
026	Field Blank	BG	07/24/24	13:20	Direct Sample	-	No	Clear	None	clear	-	-
027	G52D Duplicate	BG	07/23/24	09:26	Low Flow	45720	No	Clear	None	clear	26.17	0.40

Site Sampling Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Summary
Joppa- 3Q 2024

WO Sample	Well ID	COMMENTS
001	G01D	
002	G02D	
003	G03	
004	G05	
005	G06	
006	G07	
007	G08	
008	G09	
009	G10	
010	G101	
011	G102	
012	G105	
013	G107	
014	G109	
015	G11	
016	G111	
017	G51D	
018	G52D	
019	G53D	
020	G54D	
021	SG03	
022	XPW01	
023	XPW02	
024	XPW03	
025	XSG01	
026	Field Blank	
027	G52D Duplicate	

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Stabilized Field Parameter Summary
Joppa- 3Q 2024

Well ID	Date	Time	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	LIMS ID
G01D	7/23/2024	9:38	18.1	64.6	6.35	489.9	1.49	36.74	60.6	42.90	24071132-001A
G02D	7/23/2024	10:38	16.8	62.3	6.41	356.1	2.06	4.30	129.0	43.22	24071132-002A
G03	7/23/2024	11:37	17.9	64.3	6.31	532.4	1.96	50.18	106.2	38.22	24071132-003A
G05	7/24/2024	11:43	19.2	66.6	6.40	539.7	0.65	43.54	27.4	43.27	24071132-004A
G06	7/24/2024	10:53	17.5	63.5	6.48	643.3	0.39	97.77	184.9	40.42	24071132-005A
G07	7/24/2024	9:48	16.8	62.2	6.17	768.4	0.46	86.27	202.5	40.55	24071132-006A
G08	7/24/2024	13:28	18.2	64.8	7.06	822.8	0.34	21.93	-59.4	32.83	24071132-007A
G09	7/23/2024	10:35	17.7	63.8	6.37	668.9	1.27	180.05	52.2	40.61	24071132-008A
G10	7/24/2024	12:46	18.2	64.7	6.63	1,025.8	1.47	84.60	97.1	41.03	24071132-009A
G101	7/23/2024	13:19	18.4	65.2	6.70	326.8	6.02	122.19	108.9	45.89	24071132-010A
G102	7/23/2024	14:18	17.5	63.6	6.47	295.5	6.46	22.21	123.2	57.51	24071132-011A
G105	7/24/2024	9:02	20.2	68.3	6.29	435.2	7.60	7.75	132.3	55.48	24071132-012A
G107	7/24/2024	9:40	18.2	64.8	6.59	764.1	2.45	107.73	132.4	54.42	24071132-013A
G109	7/23/2024	12:17	18.2	64.8	6.52	270.7	5.65	23.61	108.4	50.51	24071132-014A
G11	7/23/2024	11:32	18.0	64.4	6.74	349.9	2.90	56.86	89.0	49.24	24071132-015A
G111	7/24/2024	10:34	18.3	64.9	6.08	776.1	2.49	11.66	139.8	47.65	24071132-016A
G51D	7/23/2024	12:35	19.8	67.6	5.56	353.2	2.11	33.55	182.6	44.19	24071132-017A
G52D	7/23/2024	9:26	17.9	64.2	6.74	410.2	1.95	33.36	12.2	25.77	24071132-018A
G53D	7/24/2024	12:38	19.3	66.7	6.40	441.7	0.85	8.50	60.9	37.09	24071132-019A
G54D	7/23/2024	13:58	18.2	64.8	6.65	745.4	0.91	75.50	-12.8	43.00	24071132-020A
SG03	7/22/2024	13:00	DTW Only							52.58	24071132-021A
XPW01	7/24/2024	11:06	18.2	64.7	8.50	939.6	1.46	12.21	6.3	14.72	24071132-022A
XPW02	7/24/2024	12:04	19.5	67.1	7.96	4,402.8	1.22	5.37	-113.8	3.36	24071132-023A
XPW03	7/24/2024	11:34	19.0	66.1	10.94	646.5	1.42	4.03	-18.2	12.83	24071132-024A
XSG01	7/22/2024	14:08	DTW Only							1.99	24071132-025A
Field Blank	7/24/2024	13:20	QA/QC Sample							-	24071132-026A
G52D Duplicate	7/23/2024	9:26	17.9	64.2	6.74	410.2	1.95	33.36	12.2	25.77	24071132-027A

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G01D	7/23/2024	9:17	42.90	18.2	64.7	6.49	454.0	1.24	19.68	57.6
G01D	7/23/2024	9:20	42.90	18.2	64.8	6.47	454.5	1.16	21.26	69.2
G01D	7/23/2024	9:23	42.90	18.3	64.9	6.45	456.5	1.07	25.26	76.2
G01D	7/23/2024	9:26	42.90	18.2	64.8	6.45	457.1	0.95	30.44	80.7
G01D	7/23/2024	9:29	42.90	18.2	64.7	6.44	463.8	0.91	34.57	83.1
G01D	7/23/2024	9:32	42.90	18.3	64.9	6.37	484.3	1.22	40.46	80.1
G01D	7/23/2024	9:35	42.90	18.3	64.9	6.35	488.7	1.42	39.60	69.4
G01D	7/23/2024	9:38	42.90	18.1	64.6	6.35	489.9	1.49	36.74	60.6

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G02D	7/23/2024	10:26	43.22	17.0	62.6	6.47	355.9	1.87	4.28	123.5
G02D	7/23/2024	10:29	43.22	16.9	62.5	6.44	356.0	2.03	4.46	125.7
G02D	7/23/2024	10:32	43.22	17.0	62.6	6.44	355.9	2.05	7.06	126.5
G02D	7/23/2024	10:35	43.22	17.0	62.6	6.42	356.5	2.05	10.33	128.0
G02D	7/23/2024	10:38	43.22	16.8	62.3	6.41	356.1	2.06	4.30	129.0

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G03	7/23/2024	11:25	38.22	17.8	64.1	6.30	539.7	1.96	11.64	55.3
G03	7/23/2024	11:28	38.22	17.9	64.2	6.30	545.4	1.90	18.87	75.1
G03	7/23/2024	11:31	38.22	17.9	64.1	6.30	547.5	1.88	20.62	89.1
G03	7/23/2024	11:34	38.22	17.8	64.1	6.31	543.7	1.89	30.98	98.8
G03	7/23/2024	11:37	38.22	17.9	64.3	6.31	532.4	1.96	50.18	106.2

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G05	7/24/2024	11:28	43.27	19.1	66.4	6.40	554.9	0.89	23.66	50.4
G05	7/24/2024	11:31	43.27	19.2	66.6	6.40	554.7	0.70	23.71	45.0
G05	7/24/2024	11:34	43.27	18.8	65.9	6.40	552.2	0.62	26.33	40.4
G05	7/24/2024	11:37	43.27	18.7	65.6	6.40	546.0	0.61	31.48	37.8
G05	7/24/2024	11:40	43.27	19.0	66.3	6.40	542.6	0.63	35.85	35.1
G05	7/24/2024	11:43	43.27	19.2	66.6	6.40	539.7	0.65	43.54	27.4

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G06	7/24/2024	10:32	40.42	17.0	62.6	6.43	649.0	0.48	230.96	201.0
G06	7/24/2024	10:35	40.42	17.0	62.5	6.43	645.7	0.45	206.69	198.7
G06	7/24/2024	10:38	40.42	17.0	62.6	6.43	642.2	0.44	181.69	196.3
G06	7/24/2024	10:41	40.42	17.0	62.6	6.44	641.7	0.42	155.41	194.1
G06	7/24/2024	10:44	40.42	17.1	62.9	6.44	641.8	0.41	152.81	191.7
G06	7/24/2024	10:47	40.42	17.3	63.1	6.45	642.4	0.40	129.81	189.4
G06	7/24/2024	10:50	40.42	17.3	63.2	6.47	643.8	0.40	109.72	187.1
G06	7/24/2024	10:53	40.42	17.5	63.5	6.48	643.3	0.39	97.77	184.9

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G07	7/24/2024	9:36	40.55	16.9	62.4	6.07	746.1	0.66	87.60	224.6
G07	7/24/2024	9:39	40.55	16.8	62.3	6.10	754.4	0.56	79.82	217.7
G07	7/24/2024	9:42	40.55	16.8	62.3	6.13	760.8	0.51	82.27	211.9
G07	7/24/2024	9:45	40.55	16.8	62.2	6.15	765.6	0.49	81.45	206.8
G07	7/24/2024	9:48	40.55	16.8	62.2	6.17	768.4	0.46	86.27	202.5

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G08	7/24/2024	13:13	32.83	18.5	65.3	6.98	878.6	0.78	30.37	-33.0
G08	7/24/2024	13:16	32.83	18.5	65.3	7.02	858.4	0.55	25.34	-47.8
G08	7/24/2024	13:19	32.83	18.4	65.2	7.04	844.7	0.43	21.37	-54.1
G08	7/24/2024	13:22	32.83	18.4	65.1	7.05	834.7	0.39	21.75	-57.0
G08	7/24/2024	13:25	32.83	18.3	64.9	7.06	827.7	0.36	21.33	-58.6
G08	7/24/2024	13:28	32.83	18.2	64.8	7.06	822.8	0.34	21.93	-59.4

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G09	7/23/2024	10:14	40.61	17.8	64.0	6.49	660.3	2.07	101.33	58.7
G09	7/23/2024	10:17	40.61	17.8	64.0	6.45	661.7	1.82	102.71	57.1
G09	7/23/2024	10:20	40.61	17.7	63.8	6.43	663.5	1.66	123.64	55.8
G09	7/23/2024	10:23	40.61	17.7	63.8	6.41	665.0	1.55	135.14	55.0
G09	7/23/2024	10:26	40.61	17.7	63.8	6.40	666.2	1.46	149.02	54.3
G09	7/23/2024	10:29	40.61	17.7	63.8	6.39	667.0	1.38	157.43	53.6
G09	7/23/2024	10:32	40.61	17.7	63.8	6.38	667.5	1.32	160.32	52.9
G09	7/23/2024	10:35	40.61	17.7	63.8	6.37	668.9	1.27	180.05	52.2

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G10	7/24/2024	12:31	41.03	18.1	64.5	6.93	1,046.0	2.38	98.96	92.5
G10	7/24/2024	12:34	41.03	18.0	64.5	6.82	1,041.4	1.92	80.87	94.4
G10	7/24/2024	12:37	41.03	18.0	64.4	6.75	1,037.2	1.69	61.51	95.5
G10	7/24/2024	12:40	41.03	18.1	64.6	6.70	1,033.3	1.55	301.20	96.4
G10	7/24/2024	12:43	41.03	18.1	64.6	6.65	1,031.2	1.46	135.72	97.1
G10	7/24/2024	12:46	41.03	18.2	64.7	6.63	1,025.8	1.47	84.60	97.1

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G101	7/23/2024	13:04	45.89	18.4	65.2	6.72	327.7	5.99	188.59	105.2
G101	7/23/2024	13:07	45.89	18.5	65.3	6.71	327.4	6.01	174.35	106.1
G101	7/23/2024	13:10	45.89	18.5	65.2	6.71	327.5	6.02	153.75	106.9
G101	7/23/2024	13:13	45.89	18.5	65.3	6.71	327.3	6.03	143.01	107.6
G101	7/23/2024	13:16	45.89	18.4	65.1	6.71	327.4	6.04	130.86	108.3
G101	7/23/2024	13:19	45.89	18.4	65.2	6.70	326.8	6.02	122.19	108.9

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G102	7/23/2024	13:57	57.51	17.8	64.0	6.55	302.1	6.74	64.34	118.6
G102	7/23/2024	14:00	57.51	17.8	64.1	6.52	298.8	6.70	44.58	119.9
G102	7/23/2024	14:03	57.51	17.6	63.7	6.51	294.6	6.69	33.46	120.6
G102	7/23/2024	14:06	57.51	17.5	63.6	6.50	289.5	6.61	31.08	121.2
G102	7/23/2024	14:09	57.51	17.6	63.6	6.48	284.0	6.47	26.70	121.8
G102	7/23/2024	14:12	57.51	17.5	63.5	6.47	282.2	6.37	18.72	122.6
G102	7/23/2024	14:15	57.51	17.6	63.7	6.47	287.7	6.39	22.74	123.0
G102	7/23/2024	14:18	57.51	17.5	63.6	6.47	295.5	6.46	22.21	123.2

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G105	7/24/2024	8:50	55.48	20.2	68.4	6.32	463.6	7.51	14.65	125.2
G105	7/24/2024	8:53	55.48	20.2	68.3	6.31	452.0	7.51	10.92	126.9
G105	7/24/2024	8:56	55.48	20.2	68.3	6.30	441.6	7.54	11.59	129.1
G105	7/24/2024	8:59	55.48	20.2	68.3	6.30	436.6	7.58	9.73	130.7
G105	7/24/2024	9:02	55.48	20.2	68.3	6.29	435.2	7.60	7.75	132.3

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G107	7/24/2024	9:31	54.42	18.3	65.0	6.69	746.7	4.29	329.98	131.9
G107	7/24/2024	9:34	54.42	18.6	65.4	6.60	756.7	3.42	247.63	134.9
G107	7/24/2024	9:37	54.42	18.6	65.5	6.59	762.0	2.88	146.62	133.8
G107	7/24/2024	9:40	54.42	18.2	64.8	6.59	764.1	2.45	107.73	132.4

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G109	7/23/2024	11:59	50.51	18.5	65.2	6.54	275.3	5.35	31.28	100.0
G109	7/23/2024	12:02	50.51	18.3	65.0	6.54	269.2	5.60	24.64	101.7
G109	7/23/2024	12:05	50.51	18.2	64.8	6.54	268.2	5.70	22.57	103.4
G109	7/23/2024	12:08	50.51	18.2	64.8	6.53	268.7	5.70	21.08	104.9
G109	7/23/2024	12:11	50.51	18.2	64.8	6.53	269.3	5.69	21.85	106.2
G109	7/23/2024	12:14	50.51	18.2	64.8	6.52	270.1	5.67	21.39	107.3
G109	7/23/2024	12:17	50.51	18.2	64.8	6.52	270.7	5.65	23.61	108.4

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G11	7/23/2024	11:17	49.24	17.7	63.9	6.80	354.1	3.53	39.28	86.7
G11	7/23/2024	11:20	49.24	18.0	64.3	6.78	353.1	3.33	39.67	87.3
G11	7/23/2024	11:23	49.24	18.0	64.4	6.77	352.5	3.16	40.12	87.8
G11	7/23/2024	11:26	49.24	18.0	64.4	6.76	351.3	3.03	50.76	88.2
G11	7/23/2024	11:29	49.24	17.9	64.2	6.75	351.0	2.95	57.69	88.6
G11	7/23/2024	11:32	49.24	18.0	64.4	6.74	349.9	2.90	56.86	89.0

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G111	7/24/2024	10:19	47.65	18.4	65.1	6.52	762.3	4.97	6.91	119.4
G111	7/24/2024	10:22	47.65	18.2	64.7	6.25	831.1	3.66	15.20	132.3
G111	7/24/2024	10:25	47.65	18.2	64.8	6.17	830.6	3.15	19.26	136.5
G111	7/24/2024	10:28	47.65	18.3	65.0	6.12	821.6	2.85	13.91	138.7
G111	7/24/2024	10:31	47.65	18.3	64.9	6.10	802.8	2.65	13.24	139.6
G111	7/24/2024	10:34	47.65	18.3	64.9	6.08	776.1	2.49	11.66	139.8

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G51D	7/23/2024	12:17	44.19	19.0	66.2	5.57	353.6	2.55	14.05	185.9
G51D	7/23/2024	12:20	44.19	19.7	67.5	5.58	354.7	2.70	16.24	184.0
G51D	7/23/2024	12:23	44.19	20.0	67.9	5.58	354.4	2.60	41.59	182.6
G51D	7/23/2024	12:26	44.19	20.0	67.9	5.57	354.4	2.44	50.20	182.1
G51D	7/23/2024	12:29	44.19	19.8	67.6	5.56	354.0	2.33	44.01	182.2
G51D	7/23/2024	12:32	44.19	19.8	67.6	5.56	353.8	2.23	39.83	182.6
G51D	7/23/2024	12:35	44.19	19.8	67.6	5.56	353.2	2.11	33.55	182.6

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G52D	7/23/2024	9:08	25.77	17.9	64.2	6.88	411.3	3.03	9.26	8.7
G52D	7/23/2024	9:11	25.77	17.9	64.2	6.84	411.7	2.85	7.20	9.2
G52D	7/23/2024	9:14	25.77	18.1	64.6	6.80	411.1	2.57	8.43	9.6
G52D	7/23/2024	9:17	25.77	18.0	64.5	6.78	411.1	2.31	10.05	9.9
G52D	7/23/2024	9:20	25.77	18.0	64.4	6.76	410.9	2.16	22.55	10.3
G52D	7/23/2024	9:23	25.77	17.9	64.2	6.75	410.7	2.06	31.25	10.6
G52D	7/23/2024	9:26	25.77	17.9	64.2	6.74	410.2	1.95	33.36	12.2

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G53D	7/24/2024	12:20	37.09	19.3	66.8	6.39	444.5	1.80	5.46	59.9
G53D	7/24/2024	12:23	37.09	19.3	66.7	6.38	445.4	1.54	6.02	64.3
G53D	7/24/2024	12:26	37.09	19.3	66.7	6.39	444.4	1.35	6.42	63.6
G53D	7/24/2024	12:29	37.09	19.2	66.6	6.39	444.2	1.19	6.37	64.3
G53D	7/24/2024	12:32	37.09	19.2	66.5	6.39	443.1	1.02	8.11	65.6
G53D	7/24/2024	12:35	37.09	19.2	66.6	6.39	442.3	0.92	8.36	63.2
G53D	7/24/2024	12:38	37.09	19.3	66.7	6.40	441.7	0.85	8.50	60.9

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G54D	7/23/2024	13:46	43.00	18.3	65.0	6.65	775.9	1.21	39.11	-24.8
G54D	7/23/2024	13:49	43.00	18.3	64.9	6.65	764.3	1.12	46.91	-17.7
G54D	7/23/2024	13:52	43.00	18.2	64.8	6.65	755.9	1.05	60.28	-15.1
G54D	7/23/2024	13:55	43.00	18.2	64.8	6.65	750.2	0.97	62.13	-13.8
G54D	7/23/2024	13:58	43.00	18.2	64.8	6.65	745.4	0.91	75.50	-12.8

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
SG03	7/22/2024	13:00	52.58	DTW Only						

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XPW01	7/24/2024	10:54	14.72	17.8	64.1	8.18	920.1	2.52	4.97	58.9
XPW01	7/24/2024	10:57	14.72	17.6	63.7	8.36	927.9	1.79	3.33	45.4
XPW01	7/24/2024	11:00	14.72	17.6	63.7	8.46	933.0	1.45	2.94	29.7
XPW01	7/24/2024	11:03	14.72	17.7	63.9	8.49	938.2	1.44	4.66	15.7
XPW01	7/24/2024	11:06	14.72	18.2	64.7	8.50	939.6	1.46	12.21	6.3

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XPW02	7/24/2024	11:55	3.36	19.3	66.7	8.17	4,414.1	2.81	6.69	1.1
XPW02	7/24/2024	11:58	3.36	19.6	67.2	8.06	4,406.5	1.92	5.39	-66.9
XPW02	7/24/2024	12:01	3.36	19.6	67.2	8.00	4,412.2	1.43	5.24	-100.5
XPW02	7/24/2024	12:04	3.36	19.5	67.1	7.96	4,402.8	1.22	5.37	-113.8

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XPW03	7/24/2024	11:25	12.83	19.3	66.8	10.92	620.3	2.78	3.73	-16.5
XPW03	7/24/2024	11:28	12.83	19.2	66.6	10.91	628.4	1.98	3.78	-17.0
XPW03	7/24/2024	11:31	12.83	19.1	66.3	10.93	642.4	1.61	3.91	-18.1
XPW03	7/24/2024	11:34	12.83	19.0	66.1	10.94	646.5	1.42	4.03	-18.2

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
XSG01	7/22/2024	14:08	1.99	DTW Only						

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
Field Blank	7/24/2024	13:20	-	QA/QC Sample						

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Groundwater Sampling Field Form- Qulality Parameters
Joppa- 3Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G52D Duplicate	7/23/2024	9:08	25.77	17.9	64.2	6.88	411.3	3.03	9.26	8.7
G52D Duplicate	7/23/2024	9:11	25.77	17.9	64.2	6.84	411.7	2.85	7.20	9.2
G52D Duplicate	7/23/2024	9:14	25.77	18.1	64.6	6.80	411.1	2.57	8.43	9.6
G52D Duplicate	7/23/2024	9:17	25.77	18.0	64.5	6.78	411.1	2.31	10.05	9.9
G52D Duplicate	7/23/2024	9:20	25.77	18.0	64.4	6.76	410.9	2.16	22.55	10.3
G52D Duplicate	7/23/2024	9:23	25.77	17.9	64.2	6.75	410.7	2.06	31.25	10.6
G52D Duplicate	7/23/2024	9:26	25.77	17.9	64.2	6.74	410.2	1.95	33.36	12.2

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Field Calibration Log(s)
Joppa- 3Q 2024

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 218083 Technician(s): Tracy Crroll Date: 7/23/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.01	7/23/24 8:51
7.0 Buffer	WC240307F	7.00	7/23/24 8:51
10.0 Buffer	WC230614B	10.00	7/23/24 8:52
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	98627	1412	7/23/24 8:54

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-1	LCS	7/23/24 9:00	24.1	7.08	1,405	0.29		
CCV-1	CCV	7/23/24 14:25	25.5	7.05	1,461	0.95		

Comments:

Field Meter ID: Pine 218083 Technician(s): Tracy Carroll Date: 7/24/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	7/24/24 8:34
7.0 Buffer	WC240307F	7.00	7/24/24 8:32
10.0 Buffer	WC230614B	10.00	7/24/24 8:43
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	98627	1412	7/24/24 8:29

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-2	LCS	7/24/24 8:43	24.5	7.05	1,413	0.89		
CCV-2	CCV	7/24/24 13:34	24.4	7.03	1,422	0.66		

Comments:

Site Samping Event: JOP- 24Q3
LIMS Workorder: 24071132
Technician(s): DC, TC, BG

Field Calibration Log(s)
Joppa- 3Q 2024

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 45720 Technician(s): Brett Gillihan Date: 7/23/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	7/23/24 8:20
7.0 Buffer	WC24307F	6.99	7/23/24 8:11
10.0 Buffer	WC240521B	10.02	7/23/24 8:23
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	98627	1418	7/23/24 8:34

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	1.8	7/23/24 8:42
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-1	LCS	7/23/24 8:44	21.03	7.00	1,413	1.8		
CCV-1	CCV	7/23/24 15:05	23.21	7.01	1,432	1.1		

Comments:

Field Meter ID: Pine 45720 Technician(s): Brett Gillihan Date: 7/24/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	3.99	7/24/24 8:25
7.0 Buffer	WC24307F	7.01	7/24/24 8:16
10.0 Buffer	WC240521B	10.03	7/24/24 8:29
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	98627	1418	7/24/24 8:34

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	1.5	7/24/24 8:35
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-2	LCS	7/24/24 8:36	21.4	7.01	1,418	1.2		
CCV-2	CCV	7/24/24 17:45	22.2	7.00	1,420	1.5		

Comments:

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

11669 Lilburn Park Rd.
St. Louis, MO 63146
Office: 314.344.1079

Pine Environmental Services, Inc.

Instrument ID 218083
Description YSI Pro DSS Sonde
Calibrated 6/27/2024 10:21:25AM

Manufacturer YSI
Model Number Pro DSS
Serial Number/ Lot Number 23F102674
Location St. Louis
Department

State Certified
Status Pass
Temp °C 22.2
Humidity % 43

Calibration Specifications

Group # 1
Group Name PH
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
7.00 / 7.00	PH	7.00	PH	7.01	7.02	0.29%	Pass
4.00 / 4.00	PH	4.00	PH	4.07	4.00	0.00%	Pass
10.00 / 10.00	PH	10.00	PH	10.04	10.04	0.40%	Pass

Group # 2
Group Name Turbidity (NTU)
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
0.00 / 0.00	FNU	0.00	FNU	0.34	0.00	0.00%	Pass
124.00 / 124.00	FNU	124.00	FNU	126.32	124.00	0.00%	Pass

Group # 3
Group Name Conductivity
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.000

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
1.413 / 1.413	ms/cm	1.413	ms/cm	1.501	1.413	0.00%	Pass

Group # 4
Group Name Redox (ORP)
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
240.00 / 240.00	mv	240.00	mv	242.90	240.00	0.00%	Pass

Group # 5
Group Name Dissolved Oxygen Span
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

11669 Lilburn Park Rd.
St. Louis, MO 63146
Office: 314.344.1079

Pine Environmental Services, Inc.

Instrument ID 45720
Description YSI Pro DSS
Calibrated 6/27/2024 10:15:34AM

Manufacturer YSI
Model Number Pro DSS
Serial Number/ Lot Number 19E101794
Location St. Louis
Department

State Certified
Status Pass
Temp °C 22.2
Humidity % 43

Calibration Specifications

Group # 1
Group Name PH
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
7.00 / 7.00	PH	7.00	PH	7.00	7.02	0.29%	Pass
4.00 / 4.00	PH	4.00	PH	3.89	4.00	0.00%	Pass
10.00 / 10.00	PH	10.00	PH	10.05	10.04	0.40%	Pass

Group # 2
Group Name Turbidity
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
0.00 / 0.00	NTU	0.00	NTU	-0.43	0.00	0.00%	Pass
124.00 / 124.00	NTU	124.00	NTU	128.39	124.00	0.00%	Pass

Group # 3
Group Name Conductivity
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.000

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
1.413 / 1.413	ms/cm	1.413	ms/cm	1.378	1.413	0.00%	Pass

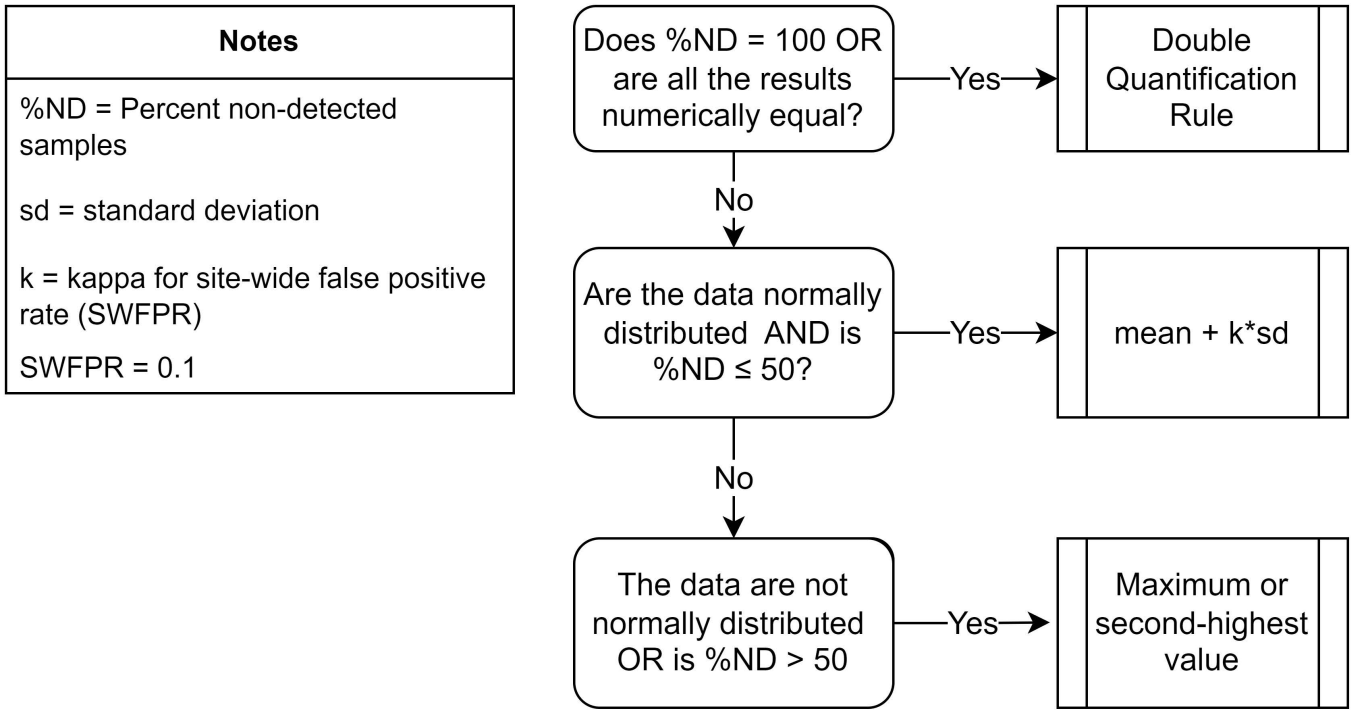
Group # 4
Group Name Redox (ORP)
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
240.00 / 240.00	mv	240.00	mv	244.10	240.00	0.00%	Pass

Group # 5
Group Name Disolved Oxygen Span
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail

APPENDIX B
STATISTICAL METHODOLOGY FOR DETERMINATION OF BACKGROUND VALUES



When data are not normally distributed or %ND > 50, the maximum value is used if the background sample size is < 60. Where the background sample size is ≥ 60, the achievable per-constituent false positive rates for the maximum and second-highest background values will be compared, and the background value with the achievable per-constituent false positive rate that is closest to, but does not exceed, the target per-constituent false positive rate of 0.015% is used.