



Dynegy Midwest Generation, LLC  
1500 Eastport Plaza Dr.  
Collinsville, IL 62234

January 28, 2023

Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, IL 62794-9276

**Re: Baldwin Power Plant Bottom Ash Pond (IEPA ID W1578510001-06) 2022 Annual Consolidated Report**

Dear Mr. LeCrone:

In accordance with 35 IAC § 845.550, Dynegy Midwest Generation, LLC (DMG) is submitting the annual consolidated report for the Baldwin Power Plant Bottom Ash Pond (IEPA ID W1578510001-06), as enclosed.

Sincerely,

A handwritten signature in blue ink, appearing to read "Phil Morris", is written over a light blue horizontal line.

Phil Morris  
Senior Environmental Director

Enclosures

Annual Consolidated Report  
Dynergy Midwest Generation, LLC  
Baldwin Power Plant  
Bottom Ash Pond; IEPA ID W1578510001-06

In accordance with 35 IAC § 845.550, Dynergy Midwest Generation, LLC (DMG) has prepared the annual consolidated report. The report is provided in three sections as follows:

Section 1

1) Annual CCR fugitive dust control report (Section 845.500(c))

Section 2

2) Annual inspection report (Section 845.540(b)), including:

- A) Annual hazard potential classification certification
- B) Annual structural stability assessment certification
- C) Annual safety factor assessment certification
- D) Inflow design flood control system plan certification

Section 3

3) Annual Groundwater Monitoring and Corrective Action Report (Section 845.610(e))

Section 1

Annual CCR Fugitive Dust Control Report

# **Annual CCR Fugitive Dust Control Report for Baldwin Power Plant**

*Prepared for:*



**Illinois Power Generating Company**

**Baldwin Power Plant  
10901 Baldwin Rd  
Baldwin, IL 62217**

**November 2022**



**Baldwin Power Plant  
ANNUAL CCR FUGITIVE DUST CONTROL REPORT**

CCR Activity	Actions Taken to Control CCR Fugitive Dust
Handling of CCR at the facility	Load CCR transport trucks from the CCR fly ash silos using a telescoping chute.
	Transfer CCR dry fly ash into rail cars using a railcar loading spout and associated dust filter collection system.
	Perform housekeeping, as necessary, in the fly ash loading area.
	Operate fly ash and CCR FGD materials handling system in accordance with good operating practices.
	Maintain and repair as necessary dust controls on the CCR fly ash handling system and the CCR fly ash rail load-out system.
	Reduce or halt operations during high wind events as necessary.
Transportation of CCR at the facility for onsite and offsite disposal	CCR fly ash to be transported offsite may be loaded into a fully-enclosed truck.
	Water is added to CCR fly ash at the loadout for on-site transport.
	CCR scrubber ash to be emplaced in offsite third-party owned/operated landfill is conditioned before loading into trucks for transport to the landfill.
	Cover or enclose trucks used to transport CCR material, as necessary.
	Limit the speed of vehicles to no more than 15 mph on facility roads.
	Sweep or rinse off the outside of the trucks transporting CCR, as necessary.
	Remove CCR, as necessary, deposited on facility road surfaces during transport.

Based on a review of the Plan and inspections associated with CCR fugitive dust control performed in the reporting year, the control measures identified in the Plan as implemented at the facility effectively minimized CCR from becoming airborne at the facility. This included application of water on areas outside the silos and on unpaved roads. The addition of a chemical dust suppressant in June and September was used in anticipation of increased vehicle travel on limited unpaved roads. The old East/East and West FA ponds are closed, capped and have vegetation now. A revision to control measures was identified in the Plan and included reducing or halting operations during high wind events.

No material changes occurred in the reporting year in site conditions potentially resulting in CCR fugitive dust becoming airborne at the facility that warrant an amendment of the Plan.

**Baldwin Power Plant  
ANNUAL CCR FUGITIVE DUST CONTROL REPORT**

**Section 2 Record of Citizen Complaints**

No citizen complaints were received regarding CCR fugitive dust at Baldwin Power Station in the reporting year.

## **Section 2**

Annual inspection report (Section 845.540(b)), including:

A) Annual hazard potential classification certification, if applicable (Section 845.440)

B) Annual structural stability assessment certification, if applicable (Section 845.450)

C) Annual safety factor assessment certification, if applicable (Section 845.460)

D) Inflow design flood control system plan certification (Section 845.510(c))



**ANNUAL INSPECTION BY A QUALIFIED PROFESSIONAL ENGINEER**

35 IAC § 845.540

(b)(1) The CCR surface impoundment must be inspected on an annual basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR surface impoundment is consistent with recognized and generally accepted engineering standards. The inspection must, at a minimum, include:

- A) A review of available information regarding the status and condition of the CCR surface impoundment, including files available in the operating record (e.g., CCR surface impoundment design and construction information required by Sections 845.220(a)(1) and 845.230(d)(2)(A), previous structural stability assessments required under Section 845.450, the results of inspections by a qualified person, and results of previous annual inspections);
- B) A visual inspection of the CCR surface impoundment to identify signs of distress or malfunction of the CCR surface impoundment and appurtenant structures;
- C) A visual inspection of any hydraulic structures underlying the base of the CCR surface impoundment or passing through the dike of the CCR surface impoundment for structural integrity and continued safe and reliable operation;
- D) The annual hazard potential classification certification, if applicable (see Section 845.440);
- E) The annual structural stability assessment certification, if applicable (see Section 845.450);
- F) The annual safety factor assessment certification, if applicable (see Section 845.460); and
- G) The inflow design flood control system plan certification (see Section 845.510(c)).

**SITE INFORMATION**

Site Name / Address / Date of Inspection	Baldwin Energy Complex Randolph County, Illinois 62217 9/12/2022
Operator Name / Address	Luminant Generation Company LLC 6555 Sierra Drive, Irving, TX 75039
CCR unit	Bottom Ash Pond

**INSPECTION REPORT 35 IAC § 845.540**

(b)(1)(D) The annual hazard potential classification certification, if applicable (see Section 845.440).	Based on a review of the CCR unit's annual hazard potential classification, the unit is classified as a Class II CCR surface impoundment.
(b)(2)(A) Any changes in geometry of the structure since the previous annual inspection.	Based on a review of the CCR unit's records and visual observation during the on-site inspection, the only change to the geometry of the structure was an approximate 18" raise of the emergency spillway crest elevation to provide additional freeboard for a design storm event.
(b)(2)(B) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection	See the attached.
b)(2)(C) The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection;	See the attached.
b)(2)(D) The storage capacity of the impounding structure at the time of the inspection	Approximately 5900 acre-feet
(b)(2)(E) The approximate volume of the impounded water and CCR contained in the unit at the time of the inspection.	Approximately 1800 acre-feet
(b)(2)(F) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit	Based on a review of the CCR unit's records and visual observation during the on-site inspection, there was no appearance of an actual or potential structural weakness of the CCR unit, nor an existing condition that is disrupting or would disrupt the operation and safety of the unit.

INSPECTION REPORT 35 IAC § 845.540

(b)(2)(G) Any other changes that may have affected the stability or operation of the impounding structure since the previous annual inspection.	Based on a review of the CCR unit's records and visual observation during the on-site inspection, no other changes which may have affected the stability or operation of the CCR unit have taken place since the previous annual inspection.
(b)(1)(G) The inflow design flood control system plan certification (see Section 845.510(c))	Based on a review of the CCR unit's records, the CCR unit is designed, operated, and maintained to adequately manage the flow from the CCR impoundment and control the peak discharge from the inflow design flood.

**35 IAC § 845.540 - Annual inspection by a qualified professional engineer.**

I, James Knutelski, P.E., certify under penalty of law that the information submitted in this report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the state of Illinois. The information submitted, is to the best of my knowledge and belief, true, accurate and complete. Based on the annual inspection, the design, construction, operation, and maintenance of the CCR Unit is consistent with recognized and generally accepted good engineering standards. Based on a review of the records for the CCR unit and a visual inspection of the unit to document no material changes to the unit, the hazard potential classification was conducted in accordance with the requirements of Section 845.440, the structural stability assessment was conducted in accordance with the requirements of Section 845.450, the safety factor assessment was conducted in accordance with the requirements of Section 845.460, and the inflow design flood control system plan assessment was conducted in accordance with the requirements of Section 845.510.



James Knutelski, PE  
Illinois PE No. 062-054206, Expires: 11/30/2023  
Date: 12/20/2022

Site Name: Baldwin Energy Complex

CCR Unit: Bottom Ash Pond

35 IAC § 845.540 (b)(2)(B)		
Instrument ID #	Type	Maximum recorded reading since previous annual inspection (ft)
P003	Piezometer	abandoned
P006	Piezometer	abandoned
P007	Piezometer	434.3'

35 IAC § 845.540 (b)(2)(C)						
Since previous inspection:	Approximate Depth / Elevation					
	Elevation (ft)			Depth (ft)		
	Minimum	Present	Maximum	Minimum	Present	Maximum
Impounded Water		417			19	
CCR	415		460	17		62

### **Section 3**

Annual Groundwater Monitoring and Corrective Action Report (Section 845.610(e))

Prepared for  
Dynergy Midwest Generation, LLC

Date  
January 31, 2023

Project No.  
1940102203-001

2022 35 I.A.C. § 845 ANNUAL  
GROUNDWATER MONITORING AND  
CORRECTIVE ACTION REPORT  
BOTTOM ASH POND  
BALDWIN POWER PLANT  
BALDWIN, ILLINOIS  
  
IEPA ID NO. W1578510001-06

2022 35 I.A.C. § 845 ANNUAL GROUNDWATER  
MONITORING AND CORRECTIVE ACTION REPORT  
BALDWIN POWER PLANT BOTTOM ASH POND

Project name Baldwin Power Plant Bottom Ash Pond  
Project no. 1940102203-001  
Recipient Dynegy Midwest Generation, LLC  
Document type Annual Groundwater Monitoring and Corrective Action Report  
Version FINAL  
Date January 31, 2023  
Prepared by Evvan G. Plank  
Checked by Lauren D. Cook  
Approved by Brian G. Hennings, PG  
Description Annual Report in Support of 35 I.A.C. § 845

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## TABLES

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## APPENDICES

Appendix A	2022 Groundwater Laboratory Reports
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## ACRONYMS AND ABBREVIATIONS

§	Section
35 I.A.C.	Title 35 of the Illinois Administrative Code
BAP	Bottom Ash Pond
BPP	Baldwin Power Plant
CCA	compliance commitment agreement
CCR	coal combustion residuals
DMG	Dynegy Midwest Generation, LLC
GMP	Groundwater Monitoring Plan
GWPS	groundwater protection standard
ID	Identification
IEPA	Illinois Environmental Protection Agency
NID	National Inventory of Dams
No.	Number
Ramboll	Ramboll Americas Engineering Solutions, Inc.
SI	surface impoundment
SSI	statistically significant increase



## EXECUTIVE SUMMARY

This report has been prepared to provide the information required by Title 35 of the Illinois Administrative Code (35 I.A.C.) Section (§) 845.610(e) (*Annual Groundwater Monitoring and Corrective Action Report*) for the Bottom Ash Pond (BAP) located at Baldwin Power Plant (BPP) near Baldwin, Illinois. The BAP is recognized by coal combustion residuals (CCR) unit identification (ID) number (No.) 601, Illinois Environmental Protection Agency (IEPA) ID No. W1578510001-06, and National Inventory of Dams (NID) No. IL50721.

As required by 35 I.A.C. § 845: Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments, an operating permit application for the BAP was submitted by Dynegy Midwest Generation, LLC (DMG) to IEPA by October 31, 2021, in accordance with the requirements specified in 35 I.A.C. § 845.230(d), and is pending approval. Therefore, the 35 I.A.C. § 845 compliance groundwater monitoring program at the BAP was not initiated in 2022. Subsequently, DMG entered into a compliance commitment agreement (CCA) with IEPA on December 28, 2022. Groundwater monitoring in accordance with the CCA will follow the proposed groundwater monitoring plan and sampling methodologies provided in the operating permit application for the BAP and is scheduled to commence no later than the second quarter of 2023. After the BAP has been issued an approved operating permit, groundwater monitoring shall be conducted in accordance with that operating permit. As specified in the CCA, groundwater sampling requirements that apply to the CCR surface impoundment (SI) under other existing permit programs will become void upon issuance of an approved operating permit pursuant to 35 I.A.C. § 845.

Additional monitoring wells were installed in 2022 and groundwater samples were collected from the installed wells. The additional monitoring wells were installed for further hydrogeologic investigation and water quality evaluation. Following investigation activities and collection of background groundwater quality, a subset of monitoring wells will be proposed for inclusion with the groundwater monitoring well network. The locations of the monitoring wells installed in 2022 are shown on Figure 1. The groundwater elevations and analytical results collected in 2022 are included in Tables 1 and 2, respectively. Laboratory reports for the samples collected in 2022 are included in Appendix A.

This report summarizes the data collected in 2022 for the BAP, and includes the following:

- An updated map showing the CCR SI and all proposed background (or upgradient) and downgradient monitoring wells, including their identification numbers, that are part of the proposed groundwater monitoring program for the BAP (Figure 1).
- Identification of monitoring wells that were installed or decommissioned during 2022, along with a narrative description of why those actions were taken (Table A).
- A potentiometric surface map for each groundwater elevation sampling event conducted in 2022 to meet the requirements of 35 I.A.C. § 845.650(b)(2) (Figures 2 through 4).
- A summary of the sampling events completed in 2022, including the number of groundwater samples that were collected for analysis for each proposed background and downgradient well and the dates the samples were collected (Table B).

## 1. INTRODUCTION

This report has been prepared by Ramboll Americas Engineering Solutions, Inc. (Ramboll) on behalf of DMG, to provide the information required by 35 I.A.C. § 845.610(e) for the BAP located at BPP near Baldwin, Illinois. The owner or operator of a CCR SI must prepare and submit to IEPA by January 31<sup>st</sup> of each year an Annual Groundwater Monitoring and Corrective Action Report for the preceding calendar year as part of the Annual Consolidated Report required by 35 I.A.C. § 845.550. The Annual Groundwater Monitoring and Corrective Action Report shall document the status of the groundwater monitoring and corrective action plan for the CCR SI, summarize key actions completed, including the status of permit applications and Agency approvals, describe any problems encountered and actions to resolve the problems, and project key activities for the upcoming year.

At a minimum, the annual report must contain the following information, to the extent available:

- A. A map, aerial image, or diagram showing the CCR SI and all background (or upgradient) and downgradient monitoring wells, including the well identification numbers, that are part of the groundwater monitoring program for the CCR SI, and a visual delineation of any exceedances of the [groundwater protection standard] GWPS.
- B. 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.
- C. A potentiometric surface map for each groundwater elevation sampling event required by 35 I.A.C. § 845.650(b)(2).
- D. In addition to all the monitoring data obtained under 35 I.A.C. §§ 845.600-680, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, and the dates the samples were collected.
- E. A narrative discussion of any statistically significant increases (SSIs) over background levels for the constituents listed in 35 I.A.C. § 845.600.
- F. Other information required to be included in the annual report as specified in 35 I.A.C. §§ 845.600-680.

A section at the beginning of the annual report that provides an overview of the current status of the groundwater monitoring program and corrective action plan for the CCR SI. At a minimum, the summary must:

- A. Specify whether groundwater monitoring data shows a SSI over background concentrations for one or more constituents listed in 35 I.A.C. § 845.600.
- B. Identify those constituents having a SSI over background concentrations and the names of the monitoring wells associated with the SSI(s).
- C. Specify whether there have been any exceedances of the GWPS for one or more constituents listed in 35 I.A.C. § 845.600.
- D. Identify those constituents with exceedances of the GWPS in 35 I.A.C. § 845.600 and the names of the monitoring wells associated with the exceedance.
- E. Provide the date when the assessment of corrective measures was initiated for the CCR SI.

- F. Provide the date when the assessment of corrective measures was completed for the CCR SI.
- G. Specify whether a remedy was selected under 35 I.A.C. § 845.670 during the current annual reporting period, and if so, the date of remedy selection.
- H. Specify whether remedial activities were initiated or are ongoing under 35 I.A.C. § 845.780 during the current annual reporting period.

This report summarizes the data collected in 2022 for the BAP, and includes the following:

- An updated map showing the CCR SI and all proposed background (or upgradient) and downgradient monitoring wells, including their identification numbers, that are part of the proposed groundwater monitoring program for the BAP (Figure 1).
- Identification of monitoring wells that were installed or decommissioned during 2022, along with a narrative description of why those actions were taken (Table A).
- A potentiometric surface map for each groundwater elevation sampling event conducted in 2022 to meet the requirements of 35 I.A.C. § 845.650(b)(2) (Figures 2 through 4).
- A summary of the sampling events completed in 2022, including the number of groundwater samples that were collected for analysis for each proposed background and downgradient well and the dates the samples were collected (Table B).

## 2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

An operating permit application for the BAP was submitted by DMG to IEPA by October 31, 2021 in accordance with the requirements specified in 35 I.A.C. § 845.230(d), and is pending approval. Therefore, the 35 I.A.C. § 845 groundwater monitoring program at the BAP has not been initiated. DMG will enter into a CCA with IEPA prior to initiating groundwater monitoring. Groundwater monitoring in accordance with the proposed groundwater monitoring plan and sampling methodologies provided in the operating permit application for the BAP is scheduled to commence no later than the second quarter of 2023. After the BAP has been issued an approved operating permit, groundwater monitoring shall be conducted in accordance with that operating permit. As specified in the CCA, groundwater sampling requirements that apply to the CCR SI under other existing permit programs will become void upon issuance of an approved operating permit pursuant to 35 I.A.C § 845.

### 3. KEY ACTIONS COMPLETED IN 2022

The proposed 35 I.A.C. § 845 monitoring well network is presented in Figure 1. Groundwater monitoring activities as required by other State and Federal programs are summarized in the groundwater monitoring plan (GMP; Ramboll, 2021), and were completed in 2022.

Additional monitoring wells and borings were installed, and groundwater samples were collected from the monitoring wells at the BAP in 2022. Well installation and boring advancement activities are summarized in Table A below. The additional monitoring wells were installed for further hydrogeologic investigation and water quality evaluation. Following investigation activities and collection of background groundwater quality, a subset of monitoring wells will be proposed for inclusion with the groundwater monitoring well network. The locations of the monitoring wells installed between September-October, 2022 are also shown on Figure 1.

Table A. Summary of Well Installation and Boring Activity

Activity (date)	Installation Scope of Work
Monitoring Well Installation (September-October 2022)	MW158R, MW192, MW193, MW194, MW258, MW358, MW392, MW393, MW394, XPW01, XPW02, XPW04, XPW05, XPW06,
Boring Installation (September-October 2022)	XCM01, XCM01A, XCM02, XPW02B, XCM03, XCM03A, XCM04, XPW04A, XPW06A, XPW06B

The additional wells installed in 2022 were sampled for three independent rounds from October to December 2022 and the results were analyzed for the parameters listed in 35 I.A.C. § 845.600, calcium, and turbidity. A summary of the samples collected from background and compliance monitoring wells in 2022 is included in Table B below. All groundwater elevation data and analytical results obtained in 2022 are included in Tables 1 and 2, respectively. Laboratory reports for the samples collected in 2022 are included in Appendix A. Potentiometric surface maps for each of the independent sampling events are presented in Figures 2 through 4.

Table B. Summary of Groundwater Samples Collected in 2022

Sampling Dates	Monitoring Wells Sampled
October 24-29, 2022	MW-158R, MW-258, MW-358, MW-192, MW-392, MW-193, MW-393, MW-194, MW-394, XPW01, XPW02, XPW04, XPW05, XPW06, TPZ-164, MW-304, MW-306, MW-356, MW-370, MW-204, MW-307, MW-116, MW-126
November 14-18, 2022	MW-158R, MW-258, MW-358, MW-192, MW-392, MW-193, MW-393, MW-194, MW-394, XPW01, XPW02, XPW04, XPW05, XPW06, TPZ-164, MW-304, MW-306, MW-356, MW-370, MW-204, MW-307, MW-116, MW-126
December 12-16, 2022	MW-158R, MW-258, MW-358, MW-192, MW-392, MW-193, MW-393, MW-194, MW-394, XPW01, XPW02, XPW04, XPW05, XPW06, TPZ-164, MW-304, MW-306, MW-356, MW-370, MW-204, MW-307, MW-203

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

Groundwater monitoring in accordance with the proposed groundwater monitoring plan using sampling methodologies provided in the operating permit application for the BAP is scheduled to commence no later than the second quarter of 2023. After the BAP has been issued an approved operating permit, groundwater monitoring shall be conducted in accordance with that operating permit.

## 5. KEY ACTIVITIES PLANNED FOR 2023

The following key activities are planned for 2023:

- Groundwater monitoring in accordance with the proposed groundwater monitoring plan and sampling methodologies provided in the operating permit application for the BAP is scheduled to commence no later than the second quarter of 2023. After the BAP has been issued an approved operating permit, groundwater monitoring shall be conducted in accordance with that operating permit. As specified in the CCA, groundwater sampling requirements that apply to the CCR SI under other existing permit programs will become void upon issuance of an approved operating permit pursuant to 35 I.A.C. § 845. Groundwater monitoring will include:
  - Monthly groundwater elevations
  - Quarterly groundwater sampling
- Pressure transducers equipped with data loggers are being purchased for measurement of monthly water level elevations. Deployment of the transducers, monitoring well inspections, and redevelopment of the monitoring wells will be completed in 2023.

## 6. REFERENCES

Illinois Environmental Protection Agency (IEPA), 2021. *In the Matter of: Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments: Title 35 Illinois Administration Code 845, Addendum*. April 15, 2021.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2021. *Groundwater Monitoring Plan*. Baldwin Power Plant, Bottom Ash Pond, Baldwin, Illinois. Dynegy Midwest Generation, LLC. October 25, 2021.



## TABLES

TABLE 1  
GROUNDWATER ELEVATIONS  
2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
BALDWIN POWER PLANT  
BOTTOM ASH POND  
BALDWIN, IL

Well ID	Monitored Unit	Well Screen Interval (feet BGS)	Well Type	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
MW-158R	UGU	18 - 8	Water Level	38.19528	-89.84941	10/24/2022	13.50	442.74
						11/14/2022	13.61	442.63
						12/12/2022	13.92	442.32
MW-192	UGU	30 - 20	Water Level	38.19920	-89.86693	10/24/2022	8.53	428.41
						11/14/2022	8.37	428.57
						12/12/2022	8.33	428.61
MW-193	UGU	32 - 22	Water Level	38.19917	-89.86266	10/24/2022	9.11	428.95
						11/14/2022	9.04	429.02
						12/12/2022	8.99	429.07
MW-194	UGU	28 - 18	Water Level	38.19914	-89.85865	10/24/2022	7.77	430.43
						11/14/2022	6.88	431.32
						12/12/2022	6.81	431.39
MW-258	UA	50 - 40	Water Level	38.19528	-89.84943	10/24/2022	14.38	441.74
						11/14/2022	14.17	441.95
						12/12/2022	14.07	442.05
MW-304	UA	55 - 45	Background	38.18833	-89.85344	10/25/2022	10.40	445.09
						11/14/2022	10.23	445.26
						12/12/2022	10.12	445.37
MW-306	UA	87.7 - 72.7	Background	38.20114	-89.84676	10/24/2022	18.10	435.07
						11/14/2022	17.89	435.28
						12/12/2022	17.77	435.40
MW-356	UA	66 - 56	Compliance	38.19896	-89.86958	10/25/2022	4.57	423.03
						11/14/2022	4.42	423.18
						12/12/2022	4.42	423.18
MW-358	UA	90 - 80	Water Level	38.19528	-89.84942	10/24/2022	84.25	371.48
						11/14/2022	79.14	376.59
						12/12/2022	69.35	386.38
MW-369	UA	66 - 56	Compliance	38.19699	-89.87026	10/25/2022	14.48	408.23
						11/14/2022	13.15	409.56
						12/12/2022	12.47	410.24
MW-370	UA	63 - 53	Compliance	38.19560	-89.86967	10/25/2022	19.13	401.72
						11/14/2022	19.07	401.78
						12/12/2022	18.68	402.17
MW-382	UA	66 - 56	Compliance	38.19454	-89.86804	10/25/2022	17.18	414.01
						11/14/2022	16.85	414.34
						12/12/2022	16.72	414.47
MW-392	UA	84 - 74	Water Level	38.19920	-89.86693	10/24/2022	9.34	427.68
						11/14/2022	8.94	428.08
						12/12/2022	8.61	428.41
MW-393	UA	85 - 75	Water Level	38.19917	-89.86267	10/24/2022	10.80	427.06
						11/14/2022	8.57	429.29
						12/12/2022	8.34	429.52
MW-394	UA	83 - 73	Water Level	38.19914	-89.85866	10/24/2022	6.77	431.52
						11/14/2022	5.60	432.69
						12/12/2022	5.11	433.18

TABLE 1  
GROUNDWATER ELEVATIONS  
2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
BALDWIN POWER PLANT  
BOTTOM ASH POND  
BALDWIN, IL

Well ID	Monitored Unit	Well Screen Interval (feet BGS)	Well Type	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
OW-256	PMP	32.5 - 28	Compliance	38.19897	-89.86961	10/25/2022	12.65	415.05
						11/14/2022	11.12	416.58
						12/12/2022	10.52	417.18
OW-257	PMP	38.5 - 34	Compliance	38.19387	-89.86746	10/25/2022	7.70	423.32
						11/14/2022	6.96	424.06
						12/12/2022	6.19	424.83
PZ-170	PMP	31.1 - 21.1	Compliance	38.19559	-89.86963	10/25/2022	17.22	404.21
						11/14/2022	17.02	404.41
						12/12/2022	16.61	404.82
PZ-182	PMP	34 - 24	Compliance	38.19451	-89.86801	10/25/2022	19.92	411.69
						11/14/2022	18.77	412.84
						12/12/2022	18.30	413.31
TPZ-164	CCR	9.7 - 5.2	Water Level	38.19559	-89.86280	10/25/2022	3.95	431.15
						11/14/2022	3.92	431.18
						12/12/2022	3.95	431.15
XPW01	CCR	12 - 7	Water Level	38.19752	-89.86447	10/25/2022	11.51	426.15
						11/14/2022	10.90	426.76
						12/12/2022	10.68	426.98
XPW02	CCR	11 - 6	Water Level	38.19789	-89.86188	10/25/2022	5.03	432.89
						11/14/2022	4.40	433.52
						12/12/2022	4.45	433.47
XPW04	CCR	16.5 - 6.5	Water Level	38.19470	-89.86382	10/25/2022	7.83	426.75
						11/14/2022	8.02	426.56
						12/12/2022	8.06	426.52
XPW05	CCR	28 - 18	Water Level	38.19623	-89.86237	10/25/2022	4.89	432.38
						11/14/2022	4.84	432.43
						12/12/2022	4.89	432.38
XPW06	CCR	10 - 5	Water Level	38.19697	-89.86895	10/25/2022	2.54	415.18
						11/14/2022	2.65	415.07
						12/12/2022	2.70	415.02

Notes:  
BGS = below ground surface  
BMP = below measuring point  
NA = not available/not applicable  
NAVD88 = North American Vertical Datum of 1988  
Monitored Unit Abbreviations:  
CCR = coal combustion residuals  
PMP = potential migration pathway  
UA = uppermost aquifer  
UGU = upper groundwater unit

TABLE 2  
ANALYTICAL RESULTS - 35 I.A.C. § 845 PARAMETERS  
2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
BALDWIN POWER PLANT  
BOTTOM ASH POND  
BALDWIN, IL

Well ID	Date	Antimony, total (mg/L)	Arsenic, total (mg/L)	Barium, total (mg/L)	Beryllium, total (mg/L)	Boron, total (mg/L)	Cadmium, total (mg/L)	Calcium, total (mg/L)	Chloride, total (mg/L)	Chromium, total (mg/L)	Cobalt, total (mg/L)	Fluoride, total (mg/L)	Lead, total (mg/L)	Lithium, total (mg/L)	Mercury, total (mg/L)	Molybdenum, total (mg/L)	pH (field) (SU)	Radium 226 + Radium 228, total (pCi/L)	Selenium, total (mg/L)	Sulfate, total (mg/L)	Thallium, total (mg/L)	Total Dissolved Solids (mg/L)
GWPS (35 I.A.C. § 845.600)		0.006	0.010	2.0	0.004	2	0.005	NA	200	0.1	0.006	4.0	0.0075	0.04	0.002	0.1	6.5/9.0	5	0.05	400	0.002	1,200
MW-116	10/25/2022	0.0004 U	0.0004 U	0.0576	0.0002 U	0.0250 J	0.0002 U	113	40.0	0.0009 J	0.0001 U	--	0.0009 J	0.00980	0.00006 U	0.0006 U	7.1	--	0.0006 U	150	0.001 U	--
MW-116	11/16/2022	0.0004 U	0.0004 U	0.0685	0.0002 U	0.023 J	0.0002 U	116	40.0	0.0007 U	0.0002 U	0.360	0.00160	0.0046 J	0.00006 J	0.0009 J	7.3	--	0.0006 U	180	0.001 U	--
MW-126	10/25/2022	0.0004 U	0.0004 U	0.110	0.0002 U	0.012 J	0.0002 U	88.2	97.0	0.0011 BJ	0.0001 J	--	0.0006 U	0.00690	0.00012 J	0.0006 U	6.8	--	0.0006 U	102	0.001 U	--
MW-126	11/16/2022	0.0004 U	0.0004 U	0.146	0.0002 U	0.0092 U	0.0002 U	91.0	111	0.0007 U	0.0002 U	0.280	0.0006 U	0.0027 J	0.00006 U	0.0006 U	6.8	--	0.0006 U	95.0	0.001 U	--
MW-158R	10/27/2022	0.0005 J	0.00100	0.131	0.0005 J	0.0610	0.0002 U	75.7	80.0	0.0008 J	0.0008 J	0.420	0.00330	0.0158	0.00011 J	0.00940	7.2	0.954	0.0008 J	75.0	0.001 U	496
MW-158R	11/17/2022	0.0004 U	0.00170	0.133	0.0002 U	0.0347	0.0002 U	76.7	85.0	0.0164	0.00210	0.390	0.00330	0.00600	0.00007 U	0.00700	--	0.449	0.0006 U	48.0	0.001 U	470 J
MW-158R	12/13/2022	0.0004 U	0.00120	0.118	0.0002 U	0.0254	0.0002 U	77.6	86.0 J	0.00560	0.00130	0.400 J	0.0006 J	0.0105	0.00006 U	0.00450	7.6	0.573 B	0.0006 U	47.0 J	0.001 U	500 J
MW-192	10/27/2022	0.00250	0.0006 J	0.0739	0.0002 U	0.0537	0.0002 U	56.8	36.0	0.0008 BJ	0.0008 U	0.460	0.0006 U	0.0225	0.00006 U	0.00470	6.9	0.255	0.0006 U	57.0	0.001 U	534
MW-192	11/16/2022	0.0007 J	0.00340	0.120	0.0002 U	0.0525	0.0002 U	65.4	34.0	0.0007 U	0.00210	0.400	0.0006 U	0.0492	0.00006 J	0.00430	7.0	1.06	0.0006 U	48.0	0.001 U	525
MW-192	12/13/2022	0.00210	0.00320	0.125	0.0002 U	0.0686	0.0002 U	67.5	37.0 J	0.0014 J	0.00210	0.450 J	0.00170	0.0396	0.00006 U	0.00680	7.0	1.07 B	0.0006 U	50.0 J	0.001 U	490 J
MW-193	10/27/2022	0.0004 U	0.00210	0.0765	0.0002 U	0.0473	0.0002 U	83.9	38.0	0.0007 U	0.0008 J	0.320	0.0006 U	0.00610	0.00006 U	0.00150 J	7.0	0.186	0.0006 U	148	0.001 U	602
MW-193	11/16/2022	0.0004 U	0.00360	0.115	0.0002 U	0.0590	0.0002 U	92.0	37.0	0.0007 U	0.00100	0.260	0.0006 U	0.0019 J	0.00006 U	0.00160	7.0	0.407	0.0006 U	154	0.001 U	590
MW-193	12/14/2022	0.0004 U	0.00290	0.0822	0.0002 U	0.0645	0.0002 U	96.5	37.0	0.00250	0.0009 J	0.270	0.0006 U	0.00570	0.00008 U	0.0014 J	7.4	1.30 B	0.0006 U	165	0.001 U	584
MW-194	10/27/2022	0.00110	0.0004 U	0.0642	0.0002 U	0.022 J	0.0002 J	83.5	30.0	0.0008 BJ	0.0008 U	0.310	0.0006 U	0.0109	0.00006 U	0.00270	6.8	0.822	0.0006 U	125	0.001 U	550
MW-194	11/17/2022	0.0004 U	0.0004 U	0.0755	0.0002 U	0.023 J	0.0002 U	83.9	29.0	0.0007 U	0.0006 J	0.260	0.0006 U	0.0038 J	0.00007 U	0.00220	7.1	0.203	0.0006 U	121	0.001 U	530 J
MW-194	12/14/2022	0.0007 J	0.00120	0.141	0.0002 U	0.019 J	0.0002 U	88.6	31.0	0.00260	0.00150	0.300	0.0006 U	0.0103	0.00008 U	0.00310	6.8	0.705 B	0.0006 U	112	0.001 U	482
MW-203	12/14/2022	0.0004 U	0.00150	0.0911	0.0002 U	0.907	0.0002 U	12.2	178	0.00380	0.0007 J	2.54	0.0009 J	0.0353	0.00008 U	0.00900	9.8	--	0.0006 U	71.0	0.001 U	1,750
MW-204	10/26/2022	0.0004 U	0.00120	0.0886	0.0002 U	1.02	0.0002 U	18.2	50.0	0.00200	0.0003 J	--	0.0006 U	0.0652	0.00006 U	0.00680	8.0	--	0.0006 U	28.0	0.001 U	--
MW-204	11/17/2022	0.0006 J	0.00150	0.122	0.0002 U	1.35	0.0002 U	18.2	51.0	0.00150	0.0002 J	1.36	0.00290	0.0569	0.00007 U	0.00840	7.8	--	0.0006 U	30.0	0.001 U	--
MW-204	12/13/2022	0.0004 U	0.00100 J	0.0933	0.0002 U	1.03	0.0002 U	17.4	57.0 J	0.0007 U	0.0001 U	1.47 J	0.0006 U	0.0656	0.00006 U	0.00510	7.9	--	0.0006 U	26.0 J	0.001 U	712 J
MW-258	10/27/2022	0.00160	0.00150	0.0562	0.0004 J	1.27	0.0002 U	4.94	55.0	0.0108	0.00120	2.51	0.00130 J	0.0594	0.00007 J	0.0277	8.7	0.515	0.0006 U	16.0	0.001 U	920
MW-258	11/17/2022	0.00100 J	0.00150	0.0621	0.0002 U	1.35	0.0002 U	4.27	54.0	0.00620	0.0007 J	2.69	0.0008 J	0.0497	0.00007 U	0.0494	8.7	0.218	0.0006 U	12.0	0.001 U	760 J
MW-258	12/13/2022	0.0004 U	0.0005 J	0.0476	0.0002 U	1.03	0.0002 U	3.76	56.0 J	0.0007 U	0.0001 U	2.96 J	0.0006 U	0.0566	0.00006 U	0.0393	9.3	0.125	0.0006 U	8 J	0.001 U	738 J
MW-304	10/26/2022	0.0004 U	0.00270	0.0186	0.0002 U	1.76	0.0002 U	10.8	175	0.0007 U	0.0001 U	1.72	0.0006 U	0.0869	0.00006 U	0.0013 J	7.9	0.693	0.0006 U	193	0.001 U	1,450

TABLE 2  
ANALYTICAL RESULTS - 35 I.A.C. § 845 PARAMETERS  
2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
BALDWIN POWER PLANT  
BOTTOM ASH POND  
BALDWIN, IL

Well ID	Date	Antimony, total (mg/L)	Arsenic, total (mg/L)	Barium, total (mg/L)	Beryllium, total (mg/L)	Boron, total (mg/L)	Cadmium, total (mg/L)	Calcium, total (mg/L)	Chloride, total (mg/L)	Chromium, total (mg/L)	Cobalt, total (mg/L)	Fluoride, total (mg/L)	Lead, total (mg/L)	Lithium, total (mg/L)	Mercury, total (mg/L)	Molybdenum, total (mg/L)	pH (field) (SU)	Radium 226 + Radium 228, total (pCi/L)	Selenium, total (mg/L)	Sulfate, total (mg/L)	Thallium, total (mg/L)	Total Dissolved Solids (mg/L)
MW-304	11/17/2022	0.0004 U	0.00330	0.0209	0.0002 U	1.91	0.0002 U	9.48	175	0.0007 U	0.0001 U	1.70	0.0006 U	0.0635	0.00007 U	0.0011 J	7.9	0.217	0.0006 U	218	0.001 U	1,490 J
MW-304	12/14/2022	0.0004 U	0.00300	0.0191	0.0002 U	2.16	0.0002 U	10.0	181	0.0007 U	0.0001 U	1.82	0.0006 U	0.0756	0.00008 U	0.0009 J	7.8	0.632 B	0.0006 U	216	0.001 U	1,300
MW-306	10/26/2022	0.0004 U	0.00230	0.0108	0.0002 U	0.125	0.0002 U	32.4	73.0	0.0007 U	0.0008 U	0.590	0.0006 U	0.0105	0.00006 U	0.0209	11.1	0.262	0.0006 U	53.0 J-	0.001 U	292
MW-306	11/16/2022	0.0004 U	0.0103	0.00510	0.0002 U	0.334	0.0002 U	1.80	49.0	0.0007 U	0.0002 J	0.640	0.0006 U	0.0169	0.00006 J	0.0162	10.3	0.103	0.0006 U	46.0	0.001 U	266
MW-306	12/14/2022	0.00110	0.00530	0.00830	0.0002 U	0.309	0.0002 U	17.0	61.0	0.0007 U	0.0001 J	0.600	0.0006 U	0.0187	0.00008 U	0.0215	10.2	0.747 B	0.0006 J	41.0	0.001 U	272
MW-307	10/26/2022	0.0004 U	0.00240	0.0323	0.0002 U	1.20	0.0002 U	38.2	195	0.00210	0.0001 U	--	0.0006 U	0.0604	0.00008 U	0.00840	9.2	--	0.0006 U	73.0	0.001 U	--
MW-307	11/17/2022	0.0007 J	0.00150	0.0195	0.0002 U	1.47 J	0.0002 U	16.7	206	0.00210	0.0002 J	0.680	0.0006 U	0.0502	0.00007 U	0.00570	9.4	--	0.0006 U	81.0	0.001 U	--
MW-307	12/14/2022	0.00110	0.00370	0.0498	0.0002 U	1.63	0.0002 U	28.5	226 J	0.00190	0.0001 U	0.890 J	0.0006 J	0.0609	0.00006 U	0.00610	9.4	--	0.0006 U	88.0 J	0.001 U	958 J
MW-356	10/27/2022	0.0004 U	0.0004 U	0.0260	0.0002 U	1.79	0.0002 U	11.0	31.0	0.0007 U	0.0008 U	2.09	0.0006 U	0.0508	0.00009 J	0.00170	7.1	0	0.0006 U	44.0	0.001 U	700
MW-356	11/17/2022	0.0004 U	0.0004 U	0.0284	0.0002 U	1.98	0.0002 U	11.7	31.0	0.0007 U	0.0001 U	1.92	0.0006 U	0.0497	0.00007 U	0.0008 J	7.8	0.651 B	0.0006 U	45.0	0.001 U	682 J
MW-356	12/13/2022	0.0006 J	0.0005 J	0.0393	0.0002 U	2.71	0.0002 U	12.3	33.0	0.0007 U	0.0001 U	2.02	0.0006 U	0.0575	0.00006 U	0.0008 J	7.7	0.746 B	0.0006 U	47.0	0.001 U	652
MW-358	10/27/2022	0.00220	0.00300	0.0933	0.0003 J	1.10	0.0002 U	12.8	688	0.0125	0.00220	2.43	0.00220	0.0621	0.00013 J	0.0782	7.9	3.57	0.00320	108	0.001 U	1,990
MW-358	11/17/2022	0.00230	0.00210	0.172	0.0002 U	1.25	0.0002 U	15.8	992	0.00540	0.00140	2.36	0.0006 U	0.0592	0.00007 U	0.0475	7.8	1.28 B	0.0006 U	101	0.001 U	2,620 J
MW-358	12/13/2022	0.00150	0.00340	0.168	0.0002 U	1.67	0.0002 U	18.6	1,120	0.00440	0.0008 J	2.10	0.0008 J	0.0696	0.00008 U	0.0388	8.4	1.86 B	0.0006 U	71.0	0.001 U	3,260
MW-370	10/27/2022	0.00150	0.0007 J	0.0380	0.0002 U	1.84	0.0002 U	39.6	1,320	0.0012 BJ	0.0008 U	3.11	0.0006 U	0.137	0.00006 U	0.00810	6.9	1.16	0.0006 U	250	0.001 U	2,980
MW-370	11/17/2022	0.0006 J	0.00100 J	0.0292	0.0002 U	1.74	0.0002 U	36.8	1,450 J-	0.00150	0.0004 J	3.06	0.0006 J	0.110	0.00007 U	0.0356	7.8	1.31 B	0.0006 U	278	0.001 U	3,200 J
MW-370	12/14/2022	0.0005 J	0.0008 J	0.0325	0.0002 U	2.34	0.0002 U	44.7	1,430	0.0007 U	0.0001 J	3.12	0.0006 U	0.118	0.00008 U	0.00970	7.5	1.58 B	0.0006 U	263	0.001 U	2,680
MW-392	10/27/2022	0.00170	0.0009 J	0.0294	0.0002 U	1.57	0.0002 U	22.1	334	0.0013 BJ	0.0008 U	3.19	0.0006 U	0.0474	0.00006 U	0.00540	7.0	0.700	0.0008 J	149	0.001 U	1,270
MW-392	11/16/2022	0.00100 J	0.00420	0.0460	0.0002 U	1.72	0.0002 U	27.2	648	0.0007 U	0.0007 J	3.36	0.0006 U	0.0512	0.00006 J	0.00430	8.0	0.362	0.0006 U	83.0	0.001 U	1,620
MW-392	12/13/2022	0.0007 J	0.00240	0.0462	0.0002 U	2.33	0.0002 U	30.2	918 J	0.0007 U	0.0003 J	3.98 J	0.0006 U	0.0646	0.00006 U	0.00190	7.7	1.15 B	0.0006 U	50.0 J	0.001 U	1,710 J
MW-393	10/27/2022	0.00200	0.00120	0.0218	0.0002 U	1.83	0.0002 U	8.54	436	0.0008 BJ	0.0008 U	5.86	0.0006 U	0.0767	0.00014 J	0.00910	7.4	0.377	0.0006 U	285	0.001 U	1,870
MW-393	11/16/2022	0.0008 J	0.00150	0.0284	0.0002 U	1.53	0.0002 U	11.3	475	0.0007 J	0.0002 U	5.95	0.0006 U	0.0722	0.00006 J	0.00750	8.1	0.495	0.0006 U	280	0.001 U	1,950
MW-393	12/14/2022	0.00240	0.00190	0.0246	0.0002 U	2.04	0.0002 U	10.9	445	0.0009 J	0.0002 J	5.79	0.0006 U	0.0603	0.00008 U	0.0135	8.6	1.40 B	0.0006 U	263	0.001 U	826
MW-394	10/27/2022	0.00210	0.00150	0.0243	0.0002 U	2.23	0.0002 U	11.6	656	0.0007 J	0.0005 J	4.42	0.0006 U	0.109	0.00008 J	0.00880	7.4	0.204	0.0006 U	348	0.001 U	2,240
MW-394	11/17/2022	0.00260	0.00100 J	0.0285	0.0002 U	1.87	0.0002 U	23.5	576	0.0007 U	0.0001 U	3.89	0.0006 U	0.0571	0.00007 U	0.0113	7.9	0.599 B	0.0006 U	336	0.001 U	1,990 J
MW-394	12/14/2022	0.00140	0.00100	0.0312	0.0002 U	2.02	0.0002 U	26.1	554	0.00310	0.0004 J	3.86	0.0006 U	0.0619	0.00008 U	0.0116	7.8	1.51 B	0.0006 U	299	0.001 U	1,950
TPZ-164	10/28/2022	0.0004 U	0.0008 J	0.0610	0.0002 U	1.47	0.0002 U	67.6	57.0	0.0007 U	0.0001 U	0.260	0.0006 U	0.0140	0.00006 U	0.0155	7.3	1.35	0.0006 U	127	0.001 U	615

TABLE 2  
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2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
BALDWIN POWER PLANT  
BOTTOM ASH POND  
BALDWIN, IL

Well ID	Date	Antimony, total (mg/L)	Arsenic, total (mg/L)	Barium, total (mg/L)	Beryllium, total (mg/L)	Boron, total (mg/L)	Cadmium, total (mg/L)	Calcium, total (mg/L)	Chloride, total (mg/L)	Chromium, total (mg/L)	Cobalt, total (mg/L)	Fluoride, total (mg/L)	Lead, total (mg/L)	Lithium, total (mg/L)	Mercury, total (mg/L)	Molybdenum, total (mg/L)	pH (field) (SU)	Radium 226 + Radium 228, total (pCi/L)	Selenium, total (mg/L)	Sulfate, total (mg/L)	Thallium, total (mg/L)	Total Dissolved Solids (mg/L)
TPZ-164	11/16/2022	0.0004 U	0.0007 J	0.0560	0.0002 U	1.38	0.0002 U	61.8	46.0	0.0007 U	0.0002 U	0.260	0.0006 U	0.00850	0.00006 U	0.0176	7.6	0.194	0.0006 U	123	0.001 U	515
TPZ-164	12/14/2022	0.0004 U	0.0009 J	0.0548	0.0002 U	1.54	0.0002 U	60.9	55.0	0.0007 U	0.0001 U	0.270	0.0006 U	0.0114	0.00008 U	0.0166	7.3	0.590 B	0.0006 U	120	0.001 U	310
XPW01	10/26/2022	0.0004 U	0.0005 J	0.104	0.0002 U	0.930	0.0002 U	65.4	21.0	0.0007 U	0.0008 U	0.610	0.0006 U	0.0142	0.00006 U	0.0464 B	7.0	0.905 J	0.0006 U	98.0	0.001 U	406
XPW01	11/15/2022	0.0004 U	0.0007 J	0.108	0.0002 U	1.03	0.0002 U	72.5	22.0	0.0013 J	0.0002 J	0.500	0.0006 U	0.0127	0.00006 U	0.0575	7.0	0.123	0.0006 U	105	0.001 U	410
XPW01	12/13/2022	0.00120	0.00930 J	0.272 J	0.00130	0.942	0.0005 J	81.5	25.0	0.0761 J	0.0143 J	0.500	0.0171	0.0354 J	0.00006 U	0.0660	6.6	1.86 J	0.0192	120	0.0011 J	385
XPW02	10/26/2022	0.0004 U	0.00240	0.205	0.0002 U	1.18	0.0002 U	121	33.0	0.0007 U	0.0001 J	0.610	0.0006 U	0.0233	0.00006 U	0.0338	7.6	0.992	0.0007 J	22.0	0.001 U	500
XPW02	11/15/2022	0.0004 U	0.00260	0.194	0.0002 U	1.20	0.0002 U	115	30.0	0.001 J	0.0002 J	0.550	0.0006 U	0.0194	0.00006 U	0.0350	7.6	0.349	0.0006 U	20.0	0.001 U	485
XPW02	12/12/2022	0.0004 U	0.00360	0.257	0.0002 U	1.52	0.0002 U	110	32.0	0.0008 J	0.0003 J	0.630	0.0006 U	0.0230	0.00006 U	0.0334	7.5	1.41 B	0.0006 U	37.0	0.001 U	390
XPW04	10/28/2022	0.0004 U	0.0005 J	0.161	0.0002 U	1.28	0.0002 U	47.9	55.0	0.0007 U	0.0001 U	0.440	0.0006 U	0.0108	0.00006 U	0.0174	8.3	1.69	0.0006 U	119	0.001 U	484
XPW04	11/15/2022	0.0004 U	0.0005 J	0.171	0.0002 U	1.15	0.0002 U	53.2	56.0	0.0007 U	0.0002 U	0.400	0.0006 U	0.00660	0.00006 U	0.0184	8.4	0.134	0.0006 U	124	0.001 U	472
XPW04	12/12/2022	0.0004 U	0.0007 J	0.196	0.0002 U	1.38	0.0002 U	51.1	55.0	0.0007 U	0.0001 U	0.420	0.0006 U	0.0136	0.00006 U	0.0169	8.0	1.13 J	0.0006 U	120	0.001 U	428
XPW05	10/26/2022	0.0004 U	0.0004 U	0.104	0.0002 U	1.02	0.0002 U	43.9	46.0	0.0007 U	0.0001 U	0.570	0.0006 U	0.00530	0.00006 U	0.0156	7.8	0.491	0.0006 U	123	0.001 U	458
XPW05	11/15/2022	0.0004 U	0.00140	0.120	0.0002 U	1.16	0.0002 U	43.5	46.0	0.0009 J	0.0002 J	0.580	0.0006 U	0.0039 J	0.00006 U	0.0169	7.7	0.419	0.0006 U	132	0.001 U	450
XPW05	12/12/2022	0.0004 U	0.00310	0.190	0.0002 U	1.25 J+	0.0002 U	43.6	48.0	0.0007 U	0.0001 J	0.620	0.0006 U	0.00930	0.00006 U	0.0228	7.2	0.956 B	0.0006 U	137	0.001 U	432
XPW06	10/26/2022	0.0004 U	0.00250	0.274	0.0002 U	2.29	0.0002 U	130	25.0	0.0007 U	0.0008 U	0.580	0.0006 U	0.0118	0.00006 J	0.0718 B	7.2	1.69	0.00420	575	0.001 U	855
XPW06	11/15/2022	0.0004 U	0.00200	0.198	0.0002 U	4.64	0.0002 U	164	18.0	0.0007 U	0.0007 J	0.610	0.0006 U	0.0019 U	0.00006 U	0.150	7.3	0.702	0.00470	475	0.001 U	1,120
XPW06	12/13/2022	0.0004 U	0.00230	0.246	0.0002 U	3.86	0.0002 U	174	18.0	0.0007 U	0.0005 J	0.590	0.0006 U	0.00750	0.00006 U	0.114	7.0	0.854 B	0.00210	508	0.001 U	975

Notes:

35 I.A.C. = Title 35 of the Illinois Administrative Code

GWPS = groundwater protection standards listed in 35 I.A.C. § 845.600

mg/L = milligrams per liter

SU = Standard Units

- = not analyzed

U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.

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.

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

B = The analyte was found in sample and in associated method blank.

## FIGURES



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

- BACKGROUND WELL
- COMPLIANCE WELL
- MONITORING WELL
- PORE WATER WELL
- WELL INSTALLED IN 2022
- PART 845 REGULATED UNIT (SUBJECT UNIT)
- FLY ASH POND SYSTEM (CLOSED)
- SITE FEATURE
- CAPPED AREA
- PROPERTY BOUNDARY



### PROPOSED PART 845 GROUNDWATER MONITORING NETWORK

2022 PART 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

**BOTTOM ASH POND**  
BALDWIN POWER PLANT  
BALDWIN, ILLINOIS

**FIGURE 1**

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.







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

- BACKGROUND WELL
- COMPLIANCE WELL
- PORE WATER WELL
- MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (10-FT CONTOUR INTERVAL, NAVD88)
- - - INFERRED GROUNDWATER ELEVATION CONTOUR
- ➔ GROUNDWATER FLOW DIRECTION
- PART 845 REGULATED UNIT (SUBJECT UNIT)
- FLY ASH POND SYSTEM (CLOSED)
- SITE FEATURE
- CAPPED AREA
- PROPERTY BOUNDARY

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



**UPPERMOST AQUIFER POTENTIOMETRIC SURFACE MAP OCTOBER 24, 2022**

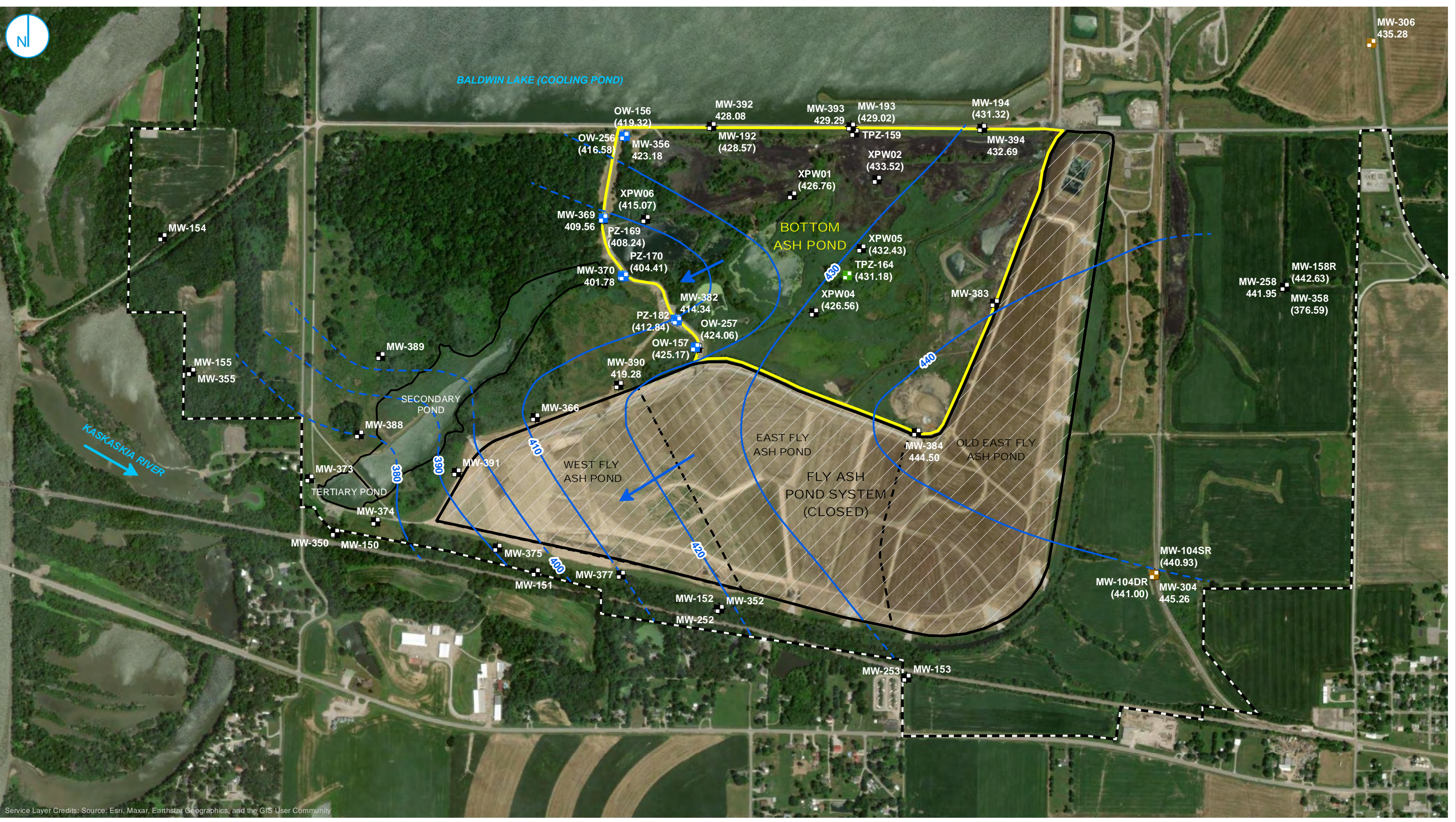
2022 PART 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 BOTTOM ASH POND  
 BALDWIN POWER PLANT  
 BALDWIN, ILLINOIS

**FIGURE 2**

RAMBOLL AMERICAS  
 ENGINEERING SOLUTIONS, INC.



PROJECT: 16900XXXXX | DATED: 1/5/2023 | DESIGNER: galarrmc



- BACKGROUND WELL
- COMPLIANCE WELL
- PORE WATER WELL
- MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (10-FT CONTOUR INTERVAL, NAVD88)
- - - INFERRED GROUNDWATER ELEVATION CONTOUR
- ➔ GROUNDWATER FLOW DIRECTION
- PART 845 REGULATED UNIT (SUBJECT UNIT)
- FLY ASH POND SYSTEM (CLOSED)
- SITE FEATURE
- CAPPED AREA
- PROPERTY BOUNDARY

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



**UPPERMOST AQUIFER POTENTIOMETRIC SURFACE MAP NOVEMBER 14, 2022**

2022 PART 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 BOTTOM ASH POND  
 BALDWIN POWER PLANT  
 BALDWIN, ILLINOIS

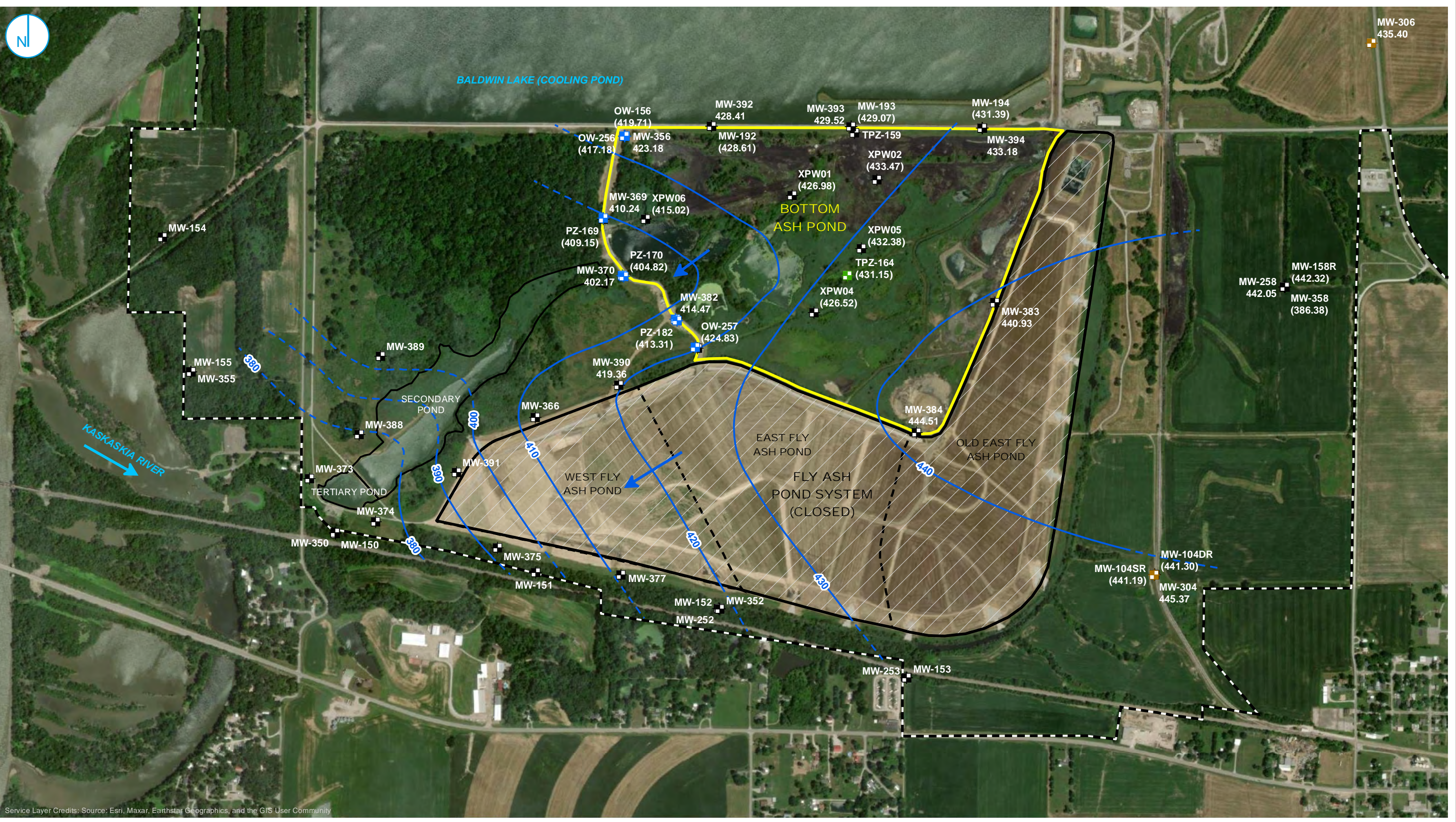
**FIGURE 3**

RAMBOLL AMERICAS  
 ENGINEERING SOLUTIONS, INC.



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

PROJECT: 169000XXXX | DATED: 1/5/2023 | DESIGNER: galarrmc



- BACKGROUND WELL
- COMPLIANCE WELL
- PORE WATER WELL
- MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (10-FT CONTOUR INTERVAL, NAVD88)
- - - INFERRED GROUNDWATER ELEVATION CONTOUR
- ➔ GROUNDWATER FLOW DIRECTION
- PART 845 REGULATED UNIT (SUBJECT UNIT)
- FLY ASH POND SYSTEM (CLOSED)
- SITE FEATURE
- CAPPED AREA
- PROPERTY BOUNDARY

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



**UPPERMOST AQUIFER POTENTIOMETRIC SURFACE MAP DECEMBER 12, 2022**

2022 PART 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

BOTTOM ASH POND  
 BALDWIN POWER PLANT  
 BALDWIN, ILLINOIS

**FIGURE 4**

RAMBOLL AMERICAS  
 ENGINEERING SOLUTIONS, INC.



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

## APPENDICES

APPENDIX A  
**LABORATORY REPORTS**

December 02, 2022

Evvan Plank  
Ramboll  
300 S. Wacker Drive  
Suite 130  
Chicago, IL 60606  
TEL: (414) 837-3687  
FAX: (414) 837-3608



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

**RE:** Vistra Baldwin

**WorkOrder:** 22101765

Dear Evvan Plank:

TEKLAB, INC received 8 samples on 10/27/2022 6:45:00 AM for the analysis presented in the following report.

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

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

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

Sincerely,



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



## Report Contents

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

**Client:** Ramboll

**Work Order:** 22101765

**Client Project:** Vistra Baldwin

**Report Date:** 02-Dec-22

**This reporting package includes the following:**

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Sample Summary	15
Dates Report	16
Quality Control Results	19
Receiving Check List	32
Chain of Custody	Appended

**Client:** Ramboll

**Work Order:** 22101765

**Client Project:** Vistra Baldwin

**Report Date:** 02-Dec-22

### 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)



**Client:** Ramboll

**Work Order:** 22101765

**Client Project:** Vistra Baldwin

**Report Date:** 02-Dec-22

### Qualifiers

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



# Case Narrative

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

**Client:** Ramboll

**Work Order:** 22101765

**Client Project:** Vistra Baldwin

**Report Date:** 02-Dec-22

**Cooler Receipt Temp:** 2.6 °C

Radium-226 and Radium-228 analysis was performed by Pace Analytical National. See attached report for results.

This report was revised on December 2, 2022 per Eric Bauer's request. The reason for the revision is to update ID MW-203 to MW-116 and ID MW-305 to MW-126 . Please replace report dated December 1, 2022 with this report. EAH 12/2/22

## Locations

### Collinsville

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

### Collinsville Air

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

### Springfield

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

### Chicago

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

### Kansas City

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



## Accreditations

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

**Client:** Ramboll

**Work Order:** 22101765

**Client Project:** Vistra Baldwin

**Report Date:** 02-Dec-22

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



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101765-001  
 Matrix: GROUNDWATER

Work Order: 22101765  
 Report Date: 02-Dec-22  
 Client Sample ID: MW-126  
 Collection Date: 10/25/2022 15:36

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		407	mg/L	1	11/01/2022 15:17	R320406
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/01/2022 15:17	R320406
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		102	mg/L	10	11/02/2022 19:28	R320515
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	40		97	mg/L	10	11/02/2022 19:27	R320534
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		88.2	mg/L	1	11/03/2022 21:24	199551
Magnesium	NELAP	0.0500		29.3	mg/L	1	11/03/2022 21:24	199551
Potassium	NELAP	0.100		0.562	mg/L	1	11/03/2022 21:24	199551
Sodium	NELAP	0.0500		153	mg/L	1	11/03/2022 21:24	199551
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 14:22	199551
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 14:22	199551
Barium	NELAP	0.0010		0.110	mg/L	5	11/02/2022 14:22	199551
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 14:22	199551
Boron	NELAP	0.025	J	0.012	mg/L	5	11/02/2022 14:22	199551
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 14:22	199551
Chromium	NELAP	0.0015	BJ	0.0011	mg/L	5	11/02/2022 14:22	199551
Cobalt	NELAP	0.0010	J	0.0001	mg/L	5	11/02/2022 14:22	199551
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 14:22	199551
Lithium	*	0.0030		0.0069	mg/L	5	11/02/2022 14:22	199551
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	11/02/2022 14:22	199551
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 14:22	199551
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/02/2022 14:22	199551
<i>Contamination present in the MBLK for Cr. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	0.00012	mg/L	1	11/03/2022 10:15	199620



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101765-002  
 Matrix: GROUNDWATER

Work Order: 22101765  
 Report Date: 02-Dec-22  
 Client Sample ID: MW-116  
 Collection Date: 10/25/2022 16:46

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		398	mg/L	1	11/01/2022 15:24	R320406
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/01/2022 15:24	R320406
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		150	mg/L	10	11/02/2022 19:49	R320515
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		40	mg/L	1	11/02/2022 19:30	R320534
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		113	mg/L	1	11/03/2022 21:28	199551
Magnesium	NELAP	0.0500		39.9	mg/L	1	11/03/2022 21:28	199551
Potassium	NELAP	0.100		0.869	mg/L	1	11/03/2022 21:28	199551
Sodium	NELAP	0.0500		85.4	mg/L	1	11/03/2022 21:28	199551
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 14:34	199551
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 14:34	199551
Barium	NELAP	0.0010		0.0576	mg/L	5	11/02/2022 14:34	199551
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 14:34	199551
Boron	NELAP	0.025	J	0.025	mg/L	5	11/03/2022 9:50	199551
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 14:34	199551
Chromium	NELAP	0.0015	BJ	0.0009	mg/L	5	11/03/2022 9:50	199551
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 14:34	199551
Lead	NELAP	0.0010	J	0.0009	mg/L	5	11/02/2022 14:34	199551
Lithium	*	0.0030		0.0098	mg/L	5	11/02/2022 14:34	199551
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	11/02/2022 14:34	199551
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 14:34	199551
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/02/2022 14:34	199551
<i>Contamination present in the MBLK for Cr. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/03/2022 10:17	199620



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101765-003  
 Matrix: GROUNDWATER

Work Order: 22101765  
 Report Date: 02-Dec-22  
 Client Sample ID: MW-204  
 Collection Date: 10/26/2022 10:18

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		327	mg/L	1	11/01/2022 15:32	R320406
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		84	mg/L	1	11/01/2022 15:32	R320406
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		28	mg/L	1	11/02/2022 19:52	R320515
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	40		50	mg/L	10	11/02/2022 19:57	R320534
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		18.2	mg/L	1	11/03/2022 21:39	199551
Magnesium	NELAP	0.0500		7.08	mg/L	1	11/03/2022 21:39	199551
Potassium	NELAP	0.100		2.27	mg/L	1	11/03/2022 21:39	199551
Sodium	NELAP	0.0500		294	mg/L	1	11/03/2022 21:39	199551
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 14:28	199551
Arsenic	NELAP	0.0010		0.0012	mg/L	5	11/02/2022 14:28	199551
Barium	NELAP	0.0010		0.0886	mg/L	5	11/02/2022 14:28	199551
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 14:28	199551
Boron	NELAP	0.0250		1.02	mg/L	5	11/02/2022 14:28	199551
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 14:28	199551
Chromium	NELAP	0.0015		0.0020	mg/L	5	11/08/2022 12:40	199700
Cobalt	NELAP	0.0010	J	0.0003	mg/L	5	11/02/2022 14:28	199551
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 14:28	199551
Lithium	*	0.0030		0.0652	mg/L	5	11/02/2022 14:28	199551
Molybdenum	NELAP	0.0015		0.0068	mg/L	5	11/02/2022 14:28	199551
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 14:28	199551
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/02/2022 14:28	199551
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/03/2022 10:20	199620



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101765-004  
 Matrix: GROUNDWATER

Work Order: 22101765  
 Report Date: 02-Dec-22  
 Client Sample ID: MW-307  
 Collection Date: 10/26/2022 12:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		321	mg/L	1	11/01/2022 16:04	R320406
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		100	mg/L	1	11/01/2022 16:04	R320406
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	20		73	mg/L	2	11/03/2022 10:25	R320580
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	40		195	mg/L	10	11/02/2022 20:05	R320534
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		38.2	mg/L	1	11/03/2022 21:43	199551
Magnesium	NELAP	0.0500		14.0	mg/L	1	11/03/2022 21:43	199551
Potassium	NELAP	0.100		2.59	mg/L	1	11/03/2022 21:43	199551
Sodium	NELAP	0.0500		311	mg/L	1	11/03/2022 21:43	199551
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 15:43	199551
Arsenic	NELAP	0.0010		0.0024	mg/L	5	11/02/2022 15:43	199551
Barium	NELAP	0.0010		0.0323	mg/L	5	11/02/2022 15:43	199551
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 15:43	199551
Boron	NELAP	0.0250		1.20	mg/L	5	11/02/2022 15:43	199551
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 15:43	199551
Chromium	NELAP	0.0015		0.0021	mg/L	5	11/08/2022 12:49	199700
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 15:43	199551
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 15:43	199551
Lithium	*	0.0030		0.0604	mg/L	5	11/02/2022 15:43	199551
Molybdenum	NELAP	0.0015		0.0084	mg/L	5	11/02/2022 15:43	199551
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 15:43	199551
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/02/2022 15:43	199551
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/16/2022 14:35	200141



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101765-005  
 Matrix: GROUNDWATER

Work Order: 22101765  
 Report Date: 02-Dec-22  
 Client Sample ID: MW-304  
 Collection Date: 10/26/2022 14:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		801	mg/L	1	11/03/2022 10:41	R320567
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		24	mg/L	1	11/03/2022 10:41	R320567
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		1450	mg/L	1	10/28/2022 13:57	R320333
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		193	mg/L	10	11/02/2022 20:21	R320515
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		1.72	mg/L	1	11/02/2022 11:58	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		175	mg/L	5	11/02/2022 20:10	R320534
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		10.8	mg/L	1	11/03/2022 21:46	199551
Iron	NELAP	0.040	J	0.037	mg/L	1	11/03/2022 21:46	199551
Magnesium	NELAP	0.0500		4.74	mg/L	1	11/03/2022 21:46	199551
Manganese	NELAP	0.0070	J	0.0043	mg/L	1	11/03/2022 21:46	199551
Potassium	NELAP	0.100		2.15	mg/L	1	11/03/2022 21:46	199551
Sodium	NELAP	0.0500		587	mg/L	1	11/03/2022 21:46	199551
Strontium	NELAP	0.0100		0.274	mg/L	1	11/03/2022 21:46	199551
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 15:49	199551
Arsenic	NELAP	0.0010		0.0027	mg/L	5	11/02/2022 15:49	199551
Barium	NELAP	0.0010		0.0186	mg/L	5	11/02/2022 15:49	199551
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 15:49	199551
Boron	NELAP	0.0250		1.76	mg/L	5	11/02/2022 15:49	199551
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 15:49	199551
Chromium	NELAP	0.0015	B	< 0.0015	mg/L	5	11/02/2022 15:49	199551
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 15:49	199551
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 15:49	199551
Lithium	*	0.0030		0.0869	mg/L	5	11/02/2022 15:49	199551
Molybdenum	NELAP	0.0015	J	0.0013	mg/L	5	11/02/2022 15:49	199551
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 15:49	199551
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/02/2022 15:49	199551
<i>Contamination present in the MBLK for Cr. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/03/2022 10:26	199620
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/07/2022 0:00	R321755





## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101765-006  
 Matrix: GROUNDWATER

Work Order: 22101765  
 Report Date: 02-Dec-22  
 Client Sample ID: XPW02  
 Collection Date: 10/26/2022 10:35

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		427	mg/L	1	11/03/2022 10:51	R320567
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/03/2022 10:51	R320567
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		500	mg/L	2.5	10/28/2022 13:58	R320333
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		22	mg/L	1	11/03/2022 10:31	R320580
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.61	mg/L	1	11/02/2022 12:00	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		33	mg/L	5	11/02/2022 20:47	R320534
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		121	mg/L	1	11/03/2022 22:05	199551
Iron	NELAP	0.0400		7.97	mg/L	1	11/03/2022 22:05	199551
Magnesium	NELAP	0.0500		26.4	mg/L	1	11/03/2022 22:05	199551
Manganese	NELAP	0.0070		1.99	mg/L	1	11/03/2022 22:05	199551
Potassium	NELAP	0.500		11.3	mg/L	5	11/07/2022 14:08	199551
Sodium	NELAP	0.0500		47.5	mg/L	1	11/03/2022 22:05	199551
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 15:56	199551
Arsenic	NELAP	0.0010		0.0024	mg/L	5	11/02/2022 15:56	199551
Barium	NELAP	0.0010		0.205	mg/L	5	11/02/2022 15:56	199551
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 15:56	199551
Boron	NELAP	0.0250		1.18	mg/L	5	11/02/2022 15:56	199551
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 15:56	199551
Chromium	NELAP	0.0015	B	< 0.0015	mg/L	5	11/02/2022 15:56	199551
Cobalt	NELAP	0.0010	J	0.0001	mg/L	5	11/02/2022 15:56	199551
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 15:56	199551
Lithium	*	0.0030		0.0233	mg/L	5	11/02/2022 15:56	199551
Molybdenum	NELAP	0.0015		0.0338	mg/L	5	11/02/2022 15:56	199551
Selenium	NELAP	0.0010	J	0.0007	mg/L	5	11/02/2022 15:56	199551
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/02/2022 15:56	199551
<i>Contamination present in the MBLK for Cr. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/03/2022 10:33	199620
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/07/2022 0:00	R321755



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101765-007  
 Matrix: GROUNDWATER

Work Order: 22101765  
 Report Date: 02-Dec-22

Client Sample ID: XPW05

Collection Date: 10/26/2022 13:33

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		180	mg/L	1	11/03/2022 11:03	R320567
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/03/2022 11:03	R320567
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		458	mg/L	1	10/28/2022 13:58	R320333
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		123	mg/L	10	11/02/2022 21:01	R320515
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.57	mg/L	1	11/02/2022 12:02	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		46	mg/L	1	11/02/2022 20:55	R320534
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		43.9	mg/L	1	11/03/2022 22:09	199280
Iron	NELAP	0.0400		1.36	mg/L	1	11/03/2022 22:09	199280
Magnesium	NELAP	0.0500		17.6	mg/L	1	11/03/2022 22:09	199280
Manganese	NELAP	0.0070		0.612	mg/L	1	11/03/2022 22:09	199280
Potassium	NELAP	0.100		9.63	mg/L	1	11/03/2022 22:09	199280
Sodium	NELAP	0.0500		79.0	mg/L	1	11/03/2022 22:09	199280
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 17:28	199280
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 17:28	199280
Barium	NELAP	0.0010		0.104	mg/L	5	11/02/2022 17:28	199280
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 17:28	199280
Boron	NELAP	0.0250		1.02	mg/L	5	11/02/2022 17:28	199280
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 17:28	199280
Chromium	NELAP	0.0015	B	< 0.0015	mg/L	5	11/02/2022 17:28	199280
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 17:28	199280
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 17:28	199280
Lithium	*	0.0030		0.0053	mg/L	5	11/02/2022 17:28	199280
Molybdenum	NELAP	0.0015		0.0156	mg/L	5	11/02/2022 17:28	199280
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 17:28	199280
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/02/2022 17:28	199280
<i>Contamination present in the MBLK for Cr. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/03/2022 10:36	199620
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/07/2022 0:00	R321755



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101765-008  
 Matrix: AQUEOUS

Work Order: 22101765  
 Report Date: 02-Dec-22

Client Sample ID: EB-01

Collection Date: 10/25/2022 18:18

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 17:35	199280
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 17:35	199280
Barium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 17:35	199280
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 17:35	199280
Boron	NELAP	0.0250		< 0.0250	mg/L	5	11/02/2022 17:35	199280
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 17:35	199280
Chromium	NELAP	0.0015	B	< 0.0015	mg/L	5	11/02/2022 17:35	199280
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 17:35	199280
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 17:35	199280
Lithium	*	0.0030		< 0.0030	mg/L	5	11/02/2022 17:35	199280
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	11/02/2022 17:35	199280
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/02/2022 17:35	199280
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/02/2022 17:35	199280

*Contamination present in the MBLK for Cr. Sample results below the reporting limit are reportable per the TNI Standard.*

<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/03/2022 10:38	199620



## Sample Summary

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

**Client:** Ramboll

**Work Order:** 22101765

**Client Project:** Vistra Baldwin

**Report Date:** 02-Dec-22

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
22101765-001	MW-126	Groundwater	3	10/25/2022 15:36
22101765-002	MW-116	Groundwater	3	10/25/2022 16:46
22101765-003	MW-204	Groundwater	3	10/26/2022 10:18
22101765-004	MW-307	Groundwater	3	10/26/2022 12:25
22101765-005	MW-304	Groundwater	4	10/26/2022 14:00
22101765-006	XPW02	Groundwater	4	10/26/2022 10:35
22101765-007	XPW05	Groundwater	4	10/26/2022 13:33
22101765-008	EB-01	Aqueous	1	10/25/2022 18:18



## Dates Report

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

Client: Ramboll

Work Order: 22101765

Client Project: Vistra Baldwin

Report Date: 02-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
22101765-001A	MW-126	10/25/2022 15:36	10/27/2022 6:45		
	SW-846 9036 (Total)				11/02/2022 19:28
	SW-846 9251 (Total)				11/02/2022 19:27
22101765-001B	MW-126	10/25/2022 15:36	10/27/2022 6:45		
	Standard Methods 2320 B (Total) 1997, 2011				11/01/2022 15:17
	Standard Methods 2320 B 1997, 2011				11/01/2022 15:17
22101765-001C	MW-126	10/25/2022 15:36	10/27/2022 6:45		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/01/2022 8:44	11/03/2022 21:24
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/01/2022 8:44	11/02/2022 14:22
	SW-846 7470A (Total)			11/02/2022 13:53	11/03/2022 10:15
22101765-002A	MW-116	10/25/2022 16:46	10/27/2022 6:45		
	SW-846 9036 (Total)				11/02/2022 19:49
	SW-846 9251 (Total)				11/02/2022 19:30
22101765-002B	MW-116	10/25/2022 16:46	10/27/2022 6:45		
	Standard Methods 2320 B (Total) 1997, 2011				11/01/2022 15:24
	Standard Methods 2320 B 1997, 2011				11/01/2022 15:24
22101765-002C	MW-116	10/25/2022 16:46	10/27/2022 6:45		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/01/2022 8:44	11/03/2022 21:28
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/01/2022 8:44	11/02/2022 14:34
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/01/2022 8:44	11/03/2022 9:50
	SW-846 7470A (Total)			11/02/2022 13:53	11/03/2022 10:17
22101765-003A	MW-204	10/26/2022 10:18	10/27/2022 6:45		
	SW-846 9036 (Total)				11/02/2022 19:52
	SW-846 9251 (Total)				11/02/2022 19:57
22101765-003B	MW-204	10/26/2022 10:18	10/27/2022 6:45		
	Standard Methods 2320 B (Total) 1997, 2011				11/01/2022 15:32
	Standard Methods 2320 B 1997, 2011				11/01/2022 15:32
22101765-003C	MW-204	10/26/2022 10:18	10/27/2022 6:45		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/01/2022 8:44	11/03/2022 21:39
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/01/2022 8:44	11/02/2022 14:28
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/04/2022 9:15	11/08/2022 12:40
	SW-846 7470A (Total)			11/02/2022 13:53	11/03/2022 10:20
22101765-004A	MW-307	10/26/2022 12:25	10/27/2022 6:45		
	SW-846 9036 (Total)				11/03/2022 10:25
	SW-846 9251 (Total)				11/02/2022 20:05
22101765-004B	MW-307	10/26/2022 12:25	10/27/2022 6:45		



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22101765

**Client Project:** Vistra Baldwin

**Report Date:** 02-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
	Standard Methods 2320 B (Total) 1997, 2011				11/01/2022 16:04
	Standard Methods 2320 B 1997, 2011				11/01/2022 16:04
22101765-004C	MW-307	10/26/2022 12:25	10/27/2022 6:45		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/01/2022 8:44	11/03/2022 21:43
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/01/2022 8:44	11/02/2022 15:43
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/04/2022 9:15	11/08/2022 12:49
	SW-846 7470A (Total)			11/16/2022 10:27	11/16/2022 14:35
22101765-005A	MW-304	10/26/2022 14:00	10/27/2022 6:45		
	SW-846 9036 (Total)				11/02/2022 20:21
	SW-846 9251 (Total)				11/02/2022 20:10
22101765-005B	MW-304	10/26/2022 14:00	10/27/2022 6:45		
	Standard Methods 2320 B (Total) 1997, 2011				11/03/2022 10:41
	Standard Methods 2320 B 1997, 2011				11/03/2022 10:41
	Standard Methods 2540 C (Total) 1997, 2011				10/28/2022 13:57
	SW-846 9214 (Total)				11/02/2022 11:58
22101765-005C	MW-304	10/26/2022 14:00	10/27/2022 6:45		
	See Attached for Subcontracting Analysis				11/07/2022 0:00
22101765-005D	MW-304	10/26/2022 14:00	10/27/2022 6:45		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/01/2022 8:44	11/03/2022 21:46
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/01/2022 8:44	11/02/2022 15:49
	SW-846 7470A (Total)			11/02/2022 13:53	11/03/2022 10:26
22101765-006A	XPW02	10/26/2022 10:35	10/27/2022 6:45		
	SW-846 9036 (Total)				11/03/2022 10:31
	SW-846 9251 (Total)				11/02/2022 20:47
22101765-006B	XPW02	10/26/2022 10:35	10/27/2022 6:45		
	Standard Methods 2320 B (Total) 1997, 2011				11/03/2022 10:51
	Standard Methods 2320 B 1997, 2011				11/03/2022 10:51
	Standard Methods 2540 C (Total) 1997, 2011				10/28/2022 13:58
	SW-846 9214 (Total)				11/02/2022 12:00
22101765-006C	XPW02	10/26/2022 10:35	10/27/2022 6:45		
	See Attached for Subcontracting Analysis				11/07/2022 0:00
22101765-006D	XPW02	10/26/2022 10:35	10/27/2022 6:45		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/01/2022 8:44	11/03/2022 22:05
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/01/2022 8:44	11/07/2022 14:08
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/01/2022 8:44	11/02/2022 15:56
	SW-846 7470A (Total)			11/02/2022 13:53	11/03/2022 10:33



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22101765

**Client Project:** Vistra Baldwin

**Report Date:** 02-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
22101765-007A	XPW05	10/26/2022 13:33	10/27/2022 6:45		
	SW-846 9036 (Total)				11/02/2022 21:01
	SW-846 9251 (Total)				11/02/2022 20:55
22101765-007B	XPW05	10/26/2022 13:33	10/27/2022 6:45		
	Standard Methods 2320 B (Total) 1997, 2011				11/03/2022 11:03
	Standard Methods 2320 B 1997, 2011				11/03/2022 11:03
	Standard Methods 2540 C (Total) 1997, 2011				10/28/2022 13:58
	SW-846 9214 (Total)				11/02/2022 12:02
22101765-007C	XPW05	10/26/2022 13:33	10/27/2022 6:45		
	See Attached for Subcontracting Analysis				11/07/2022 0:00
22101765-007D	XPW05	10/26/2022 13:33	10/27/2022 6:45		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/01/2022 14:48	11/03/2022 22:09
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/01/2022 14:48	11/02/2022 17:28
	SW-846 7470A (Total)			11/02/2022 13:53	11/03/2022 10:36
22101765-008A	EB-01	10/25/2022 18:18	10/27/2022 6:45		
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/01/2022 14:48	11/02/2022 17:35
	SW-846 7470A (Total)			11/02/2022 13:53	11/03/2022 10:38



## Quality Control Results

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

**Client:** Ramboll

**Work Order:** 22101765

**Client Project:** Vistra Baldwin

**Report Date:** 02-Dec-22

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

Batch R320333		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	10/28/2022
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/28/2022
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/28/2022

Batch R320333		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		964	1000	0	96.4	90	110	10/28/2022
Total Dissolved Solids		20		986	1000	0	98.6	90	110	10/28/2022
Total Dissolved Solids		20		980	1000	0	98.0	90	110	10/28/2022

Batch R320333		SampType: DUP		Units mg/L						
SampID: 22101765-005BDUP										
										RPD Limit: 5
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		1450				1448	0.41	10/28/2022

### SW-846 9036 (TOTAL)

Batch R320515		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	11/02/2022

Batch R320515		SampType: MBLK		Units mg/L						
SampID: MB-R320515										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		< 10	7.620	0	0	-100	100	11/02/2022

Batch R320515		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	95.8	90	110	11/02/2022

Batch R320515		SampType: LCS		Units mg/L						
SampID: LCS-R320515										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		19	20.00	0	95.8	90	110	11/02/2022





## Quality Control Results

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**Client:** Ramboll

**Work Order:** 22101765

**Client Project:** Vistra Baldwin

**Report Date:** 02-Dec-22

### SW-846 9036 (TOTAL)

Batch R320515		SampType: MS		Units mg/L							Date Analyzed
SampID: 22101765-005AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		100		<b>390</b>	200.0	192.9	98.4	85	115	11/02/2022	

Batch R320515		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 22101765-005AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Sulfate		100		<b>375</b>	200.0	192.9	91.2	389.8	3.79	11/02/2022		

Batch R320580		SampType: MBLK		Units mg/L							Date Analyzed
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		<b>&lt; 10</b>	6.140	0	0	-100	100	11/03/2022	

Batch R320580		SampType: LCS		Units mg/L							Date Analyzed
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		<b>20</b>	20.00	0	98.4	90	110	11/03/2022	

### SW-846 9214 (TOTAL)

Batch R320491		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		<b>&lt; 0.10</b>	0.0370	0	0	-100	100	11/02/2022	

Batch R320491		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		<b>1.01</b>	1.000	0	101.3	90	110	11/02/2022	

Batch R320491		SampType: MS		Units mg/L							Date Analyzed
SampID: 22101765-007BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		<b>2.66</b>	2.000	0.5730	104.2	75	125	11/02/2022	



## Quality Control Results

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**Client:** Ramboll

**Work Order:** 22101765

**Client Project:** Vistra Baldwin

**Report Date:** 02-Dec-22

### SW-846 9214 (TOTAL)

Batch R320491		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 22101765-007BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.66	2.000	0.5730	104.1	2.657	0.08	11/02/2022	

### SW-846 9251 (TOTAL)

Batch R320534		SampType: MBLK		Units mg/L							
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		< 4	0.5000	0	0	-100	100	11/02/2022	

### Batch R320534 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	99.7	90	110	11/02/2022	

### Batch R320534 SampType: MS Units mg/L

SampID: 22101765-005AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		20	E	261	100.0	174.8	86.6	85	115	11/02/2022	

### Batch R320534 SampType: MSD Units mg/L

Batch R320534		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 22101765-005AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		20	E	265	100.0	174.8	90.0	261.5	1.28	11/02/2022	

### Batch R320588 SampType: MBLK Units mg/L

SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		< 4	0.5000	0	0	-100	100	11/03/2022	

### Batch R320588 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	100.4	90	110	11/03/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22101765

Client Project: Vistra Baldwin

Report Date: 02-Dec-22

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

Batch 199280      SampType: MBLK      Units mg/L  
 SampID: MBLK-199280

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	11/02/2022
Antimony		0.0500		< 0.0500	0.0068	0	0	-100	100	11/02/2022
Arsenic		0.0250		< 0.0250	0.0087	0	0	-100	100	11/02/2022
Arsenic		0.0250		< 0.0250	0.0087	0	0	-100	100	11/02/2022
Barium		0.0025		< 0.0025	0.0007	0	0	-100	100	11/02/2022
Barium		0.0025		< 0.0025	0.0007	0	0	-100	100	11/02/2022
Beryllium		0.0005		< 0.0005	0.0002	0	0	-100	100	11/02/2022
Beryllium		0.0005		< 0.0005	0.0002	0	0	-100	100	11/02/2022
Boron		0.0200		< 0.0200	0.0090	0	0	-100	100	11/02/2022
Boron		0.0200		< 0.0200	0.0090	0	0	-100	100	11/02/2022
Cadmium		0.0020		< 0.0020	0.0005	0	0	-100	100	11/02/2022
Cadmium		0.0020		< 0.0020	0.0005	0	0	-100	100	11/02/2022
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	11/02/2022
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	11/02/2022
Chromium		0.0050		< 0.0050	0.0028	0	0	-100	100	11/02/2022
Cobalt		0.0050		< 0.0050	0.0020	0	0	-100	100	11/02/2022
Cobalt		0.0050		< 0.0050	0.0020	0	0	-100	100	11/02/2022
Iron		0.0400		< 0.0400	0.0200	0	0	-100	100	11/02/2022
Lead		0.0150		< 0.0150	0.0040	0	0	-100	100	11/02/2022
Lead		0.0150		< 0.0150	0.0040	0	0	-100	100	11/02/2022
Lithium	*	0.0050		< 0.0050	0.0019	0	0	-100	100	11/02/2022
Lithium	*	0.0050		< 0.0050	0.0019	0	0	-100	100	11/02/2022
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	11/02/2022
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	11/02/2022
Manganese		0.0070		< 0.0070	0.0025	0	0	-100	100	11/02/2022
Manganese		0.0070		< 0.0070	0.0025	0	0	-100	100	11/02/2022
Molybdenum		0.0100		< 0.0100	0.0037	0	0	-100	100	11/02/2022
Molybdenum		0.0100		< 0.0100	0.0037	0	0	-100	100	11/02/2022
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	11/02/2022
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	11/02/2022
Selenium		0.0400		< 0.0400	0.0170	0	0	-100	100	11/02/2022
Selenium		0.0400		< 0.0400	0.0170	0	0	-100	100	11/02/2022
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	11/02/2022
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	11/02/2022
Strontium	*	0.0100		< 0.0100	0.0013	0	0	-100	100	11/02/2022
Strontium	*	0.0100		< 0.0100	0.0013	0	0	-100	100	11/02/2022



## Quality Control Results

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

**Client:** Ramboll

**Work Order:** 22101765

**Client Project:** Vistra Baldwin

**Report Date:** 02-Dec-22

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

**Batch** 199280      **SampType:** MBLK      Units mg/L  
**SampID:** MBLK-199280

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Thallium		0.0500		< 0.0500	0.0111	0	0	-100	100	11/02/2022
Thallium		0.0500		< 0.0500	0.0111	0	0	-100	100	11/02/2022

**Batch** 199280      **SampType:** LCS      Units mg/L  
**SampID:** LCS-199280

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0500		0.504	0.5000	0	100.9	85	115	11/02/2022
Arsenic		0.0250		0.522	0.5000	0	104.3	85	115	11/02/2022
Barium		0.0025		2.05	2.000	0	102.4	85	115	11/02/2022
Beryllium		0.0005		0.0512	0.0500	0	102.4	85	115	11/02/2022
Boron		0.0200		0.510	0.5000	0	101.9	85	115	11/02/2022
Cadmium		0.0020		0.0495	0.0500	0	99.0	85	115	11/02/2022
Calcium		0.100		2.56	2.500	0	102.4	85	115	11/02/2022
Chromium		0.0050		0.201	0.2000	0	100.4	85	115	11/02/2022
Cobalt		0.0050		0.509	0.5000	0	101.7	85	115	11/02/2022
Iron		0.0400		1.99	2.000	0	99.4	85	115	11/02/2022
Lead		0.0150		0.503	0.5000	0	100.6	85	115	11/02/2022
Lithium	*	0.0050		0.534	0.5000	0	106.7	85	115	11/02/2022
Magnesium		0.0500		2.59	2.500	0	103.8	85	115	11/02/2022
Manganese		0.0070		0.502	0.5000	0	100.4	85	115	11/02/2022
Molybdenum		0.0100		0.503	0.5000	0	100.7	85	115	11/02/2022
Potassium		0.100		2.52	2.500	0	100.9	85	115	11/02/2022
Selenium		0.0400		0.481	0.5000	0	96.1	85	115	11/02/2022
Sodium		0.0500		2.40	2.500	0	95.8	85	115	11/02/2022
Strontium	*	0.0100		0.104	0.1000	0	104.5	85	115	11/02/2022
Thallium		0.0500		0.247	0.2500	0	98.8	85	115	11/02/2022



## Quality Control Results

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Client: Ramboll

Work Order: 22101765

Client Project: Vistra Baldwin

Report Date: 02-Dec-22

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

Batch 199551      SampType: MBLK      Units mg/L

SampleID: MBLK-199551

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	11/03/2022
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	11/02/2022
Iron		0.0400	JS	0.029	0.0200	0	146.5	-100	100	11/02/2022
Iron		0.0400		< 0.0400	0.0300	0	0	-100	100	11/03/2022
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	11/03/2022
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	11/02/2022
Manganese		0.0070		< 0.0070	0.0025	0	0	-100	100	11/03/2022
Manganese		0.0070		< 0.0070	0.0025	0	0	-100	100	11/02/2022
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	11/02/2022
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	11/03/2022
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	11/02/2022
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	11/03/2022
Strontium		0.0100		< 0.0100	0.0013	0	0	-100	100	11/02/2022
Strontium		0.0100		< 0.0100	0.0013	0	0	-100	100	11/03/2022

Batch 199551      SampType: LCS      Units mg/L

SampleID: LCS-199551

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		2.60	2.500	0	104.2	85	115	11/02/2022
Iron		0.0400		2.05	2.000	0	102.4	85	115	11/02/2022
Magnesium		0.0500		2.62	2.500	0	104.8	85	115	11/02/2022
Manganese		0.0070		0.510	0.5000	0	102.1	85	115	11/02/2022
Potassium		0.100		2.56	2.500	0	102.2	85	115	11/02/2022
Sodium		0.0500		2.39	2.500	0	95.6	85	115	11/02/2022
Strontium		0.0100		0.104	0.1000	0	103.7	85	115	11/02/2022

Batch 199551      SampType: MS      Units mg/L

SampleID: 22101765-002CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		116	2.500	112.9	116.0	75	125	11/03/2022
Magnesium		0.0500		42.2	2.500	39.94	92.0	75	125	11/03/2022
Potassium		0.100		3.38	2.500	0.8691	100.5	75	125	11/03/2022
Sodium		0.0500		87.8	2.500	85.35	98.4	75	125	11/03/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22101765

Client Project: Vistra Baldwin

Report Date: 02-Dec-22

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

Batch 199551		SampType: MSD		Units mg/L				RPD Limit: 20			Date Analyzed
SampID: 22101765-002CMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100		<b>115</b>	2.500	112.9	80.0	115.8	0.78	11/03/2022	
Magnesium		0.0500		<b>42.4</b>	2.500	39.94	97.6	42.24	0.33	11/03/2022	
Potassium		0.100		<b>3.37</b>	2.500	0.8691	100.2	3.381	0.21	11/03/2022	
Sodium		0.0500		<b>87.3</b>	2.500	85.35	76.4	87.81	0.63	11/03/2022	

Batch 199700		SampType: MBLK		Units mg/L						Date Analyzed
SampID: MBLK-199700										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		< <b>0.100</b>	0.0350	0	0	-100	100	11/10/2022
Calcium		0.100		< <b>0.100</b>	0.0350	0	0	-100	100	11/04/2022
Iron		0.0400		< <b>0.0400</b>	0.0200	0	0	-100	100	11/10/2022
Iron		0.0400		< <b>0.0400</b>	0.0200	0	0	-100	100	11/04/2022
Magnesium		0.0500		< <b>0.0500</b>	0.0055	0	0	-100	100	11/07/2022
Magnesium		0.0500		< <b>0.0500</b>	0.0055	0	0	-100	100	11/10/2022
Manganese		0.0070		< <b>0.0070</b>	0.0025	0	0	-100	100	11/10/2022
Manganese		0.0070		< <b>0.0070</b>	0.0025	0	0	-100	100	11/04/2022
Potassium		0.100		< <b>0.100</b>	0.0400	0	0	-100	100	11/15/2022
Potassium		0.100		< <b>0.100</b>	0.0400	0	0	-100	100	11/04/2022
Sodium		0.0500		< <b>0.0500</b>	0.0180	0	0	-100	100	11/10/2022
Sodium		0.0500		< <b>0.0500</b>	0.0180	0	0	-100	100	11/04/2022
Strontium	*	0.0100		< <b>0.0100</b>	0.0013	0	0	-100	100	11/04/2022
Strontium	*	0.0100		< <b>0.0100</b>	0.0013	0	0	-100	100	11/10/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22101765

Client Project: Vistra Baldwin

Report Date: 02-Dec-22

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

Batch 199700		SampType: LCS		Units mg/L						
SampID: LCS-199700										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		<b>2.63</b>	2.500	0	105.3	85	115	11/04/2022
Calcium		0.100		<b>2.61</b>	2.500	0	104.5	85	115	11/10/2022
Iron		0.0400		<b>1.99</b>	2.000	0	99.4	85	115	11/04/2022
Iron		0.0400		<b>2.05</b>	2.000	0	102.6	85	115	11/10/2022
Magnesium		0.0500	B	<b>2.54</b>	2.500	0	101.6	85	115	11/04/2022
Magnesium		0.0500		<b>2.63</b>	2.500	0	105.1	85	115	11/10/2022
Manganese		0.0070		<b>0.514</b>	0.5000	0	102.9	85	115	11/10/2022
Manganese		0.0070		<b>0.502</b>	0.5000	0	100.4	85	115	11/04/2022
Potassium		0.100		<b>2.68</b>	2.500	0	107.1	85	115	11/04/2022
Sodium		0.0500		<b>2.49</b>	2.500	0	99.6	85	115	11/04/2022
Sodium		0.0500		<b>2.34</b>	2.500	0	93.4	85	115	11/10/2022
Strontium	*	0.0100		<b>0.103</b>	0.1000	0	102.7	85	115	11/10/2022
Strontium	*	0.0100		<b>0.106</b>	0.1000	0	105.8	85	115	11/04/2022

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

Batch 199280		SampType: MBLK		Units mg/L						
SampID: MBLK-199280										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	11/02/2022
Arsenic		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	11/02/2022
Barium		0.0010		< <b>0.0010</b>	0.0007	0	0	-100	100	11/02/2022
Beryllium		0.0010		< <b>0.0010</b>	0.0002	0	0	-100	100	11/02/2022
Boron		0.0250		< <b>0.0250</b>	0.0093	0	0	-100	100	11/02/2022
Cadmium		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	11/02/2022
Chromium		0.0015	S	<b>0.0167</b>	0.0007	0	2381	-100	100	11/02/2022
Cobalt		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	11/02/2022
Lead		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	11/02/2022
Lithium	*	0.0030		< <b>0.0030</b>	0.0015	0	0	-100	100	11/02/2022
Molybdenum		0.0015		< <b>0.0015</b>	0.0006	0	0	-100	100	11/02/2022
Selenium		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	11/02/2022
Thallium		0.0020		< <b>0.0020</b>	0.0010	0	0	-100	100	11/02/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22101765

Client Project: Vistra Baldwin

Report Date: 02-Dec-22

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

Batch 199280      SampType: LCS      Units mg/L  
 SampID: LCS-199280

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		<b>0.510</b>	0.5000	0	101.9	80	120	11/02/2022
Arsenic		0.0010		<b>0.508</b>	0.5000	0	101.5	80	120	11/02/2022
Barium		0.0010		<b>1.98</b>	2.000	0	98.8	80	120	11/02/2022
Beryllium		0.0010		<b>0.0460</b>	0.0500	0	92.1	80	120	11/02/2022
Boron		0.0250		<b>0.462</b>	0.5000	0	92.5	80	120	11/02/2022
Cadmium		0.0010		<b>0.0482</b>	0.0500	0	96.5	80	120	11/02/2022
Chromium		0.0015	B	<b>0.200</b>	0.2000	0	100.0	80	120	11/02/2022
Cobalt		0.0010		<b>0.492</b>	0.5000	0	98.4	80	120	11/02/2022
Lead		0.0010		<b>0.474</b>	0.5000	0	94.7	80	120	11/02/2022
Lithium	*	0.0030		<b>0.486</b>	0.5000	0	97.2	80	120	11/02/2022
Molybdenum		0.0015		<b>0.490</b>	0.5000	0	98.0	80	120	11/02/2022
Selenium		0.0010		<b>0.464</b>	0.5000	0	92.8	80	120	11/02/2022
Thallium		0.0020		<b>0.226</b>	0.2500	0	90.4	80	120	11/02/2022

Batch 199280      SampType: MS      Units mg/L  
 SampID: 22101765-008AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		<b>0.511</b>	0.5000	0	102.2	75	125	11/02/2022
Arsenic		0.0010		<b>0.503</b>	0.5000	0	100.6	75	125	11/02/2022
Barium		0.0010		<b>2.00</b>	2.000	0	99.8	75	125	11/02/2022
Beryllium		0.0010		<b>0.0454</b>	0.0500	0	90.8	75	125	11/02/2022
Boron		0.0250		<b>0.456</b>	0.5000	0	91.3	75	125	11/02/2022
Cadmium		0.0010		<b>0.0482</b>	0.0500	0	96.3	75	125	11/02/2022
Chromium		0.0015	B	<b>0.201</b>	0.2000	0	100.4	75	125	11/02/2022
Cobalt		0.0010		<b>0.489</b>	0.5000	0	97.9	75	125	11/02/2022
Lead		0.0010		<b>0.475</b>	0.5000	0	95.0	75	125	11/02/2022
Lithium	*	0.0030		<b>0.487</b>	0.5000	0	97.4	75	125	11/02/2022
Molybdenum		0.0015		<b>0.489</b>	0.5000	0	97.7	75	125	11/02/2022
Selenium		0.0010		<b>0.459</b>	0.5000	0	91.8	75	125	11/02/2022
Thallium		0.0020		<b>0.230</b>	0.2500	0	91.9	75	125	11/02/2022





## Quality Control Results

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

Client: Ramboll

Work Order: 22101765

Client Project: Vistra Baldwin

Report Date: 02-Dec-22

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

Batch 199280		SampType: MSD		Units mg/L				RPD Limit: 20			Date Analyzed
SampID: 22101765-008AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Antimony		0.0010		<b>0.509</b>	0.5000	0	101.8	0.5109	0.36	11/02/2022	
Arsenic		0.0010		<b>0.506</b>	0.5000	0	101.3	0.5028	0.70	11/02/2022	
Barium		0.0010		<b>2.03</b>	2.000	0	101.6	1.995	1.88	11/02/2022	
Beryllium		0.0010		<b>0.0466</b>	0.0500	0	93.2	0.04539	2.58	11/02/2022	
Boron		0.0250		<b>0.452</b>	0.5000	0	90.4	0.4563	0.96	11/02/2022	
Cadmium		0.0010		<b>0.0484</b>	0.0500	0	96.8	0.04815	0.53	11/02/2022	
Chromium		0.0015	B	<b>0.201</b>	0.2000	0	100.3	0.2009	0.10	11/02/2022	
Cobalt		0.0010		<b>0.502</b>	0.5000	0	100.5	0.4894	2.63	11/02/2022	
Lead		0.0010		<b>0.493</b>	0.5000	0	98.5	0.4750	3.66	11/02/2022	
Lithium	*	0.0030		<b>0.486</b>	0.5000	0	97.2	0.4872	0.30	11/02/2022	
Molybdenum		0.0015		<b>0.495</b>	0.5000	0	99.1	0.4886	1.38	11/02/2022	
Selenium		0.0010		<b>0.460</b>	0.5000	0	92.0	0.4589	0.24	11/02/2022	
Thallium		0.0020		<b>0.235</b>	0.2500	0	94.0	0.2296	2.33	11/02/2022	

Batch 199551		SampType: MBLK		Units mg/L						Date Analyzed
SampID: MBLK-199551										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	11/02/2022
Arsenic		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	11/02/2022
Barium		0.0010		< <b>0.0010</b>	0.0007	0	0	-100	100	11/02/2022
Beryllium		0.0010		< <b>0.0010</b>	0.0002	0	0	-100	100	11/02/2022
Boron		0.0250		< <b>0.0250</b>	0.0093	0	0	-100	100	11/02/2022
Cadmium		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	11/02/2022
Chromium		0.0015	S	<b>0.0026</b>	0.0007	0	372.6	-100	100	11/02/2022
Cobalt		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	11/02/2022
Lead		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	11/02/2022
Lithium	*	0.0030		< <b>0.0030</b>	0.0015	0	0	-100	100	11/02/2022
Molybdenum		0.0015		< <b>0.0015</b>	0.0006	0	0	-100	100	11/02/2022
Selenium		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	11/02/2022
Thallium		0.0020		< <b>0.0020</b>	0.0010	0	0	-100	100	11/02/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22101765

Client Project: Vistra Baldwin

Report Date: 02-Dec-22

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

Batch 199551      SampType: LCS      Units mg/L  
 SampID: LCS-199551

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		<b>0.524</b>	0.5000	0	104.8	80	120	11/02/2022
Arsenic		0.0010		<b>0.516</b>	0.5000	0	103.2	80	120	11/02/2022
Barium		0.0010		<b>2.01</b>	2.000	0	100.7	80	120	11/02/2022
Beryllium		0.0010		<b>0.0490</b>	0.0500	0	98.0	80	120	11/02/2022
Boron		0.0250		<b>0.478</b>	0.5000	0	95.6	80	120	11/02/2022
Cadmium		0.0010		<b>0.0501</b>	0.0500	0	100.3	80	120	11/02/2022
Chromium		0.0015	B	<b>0.203</b>	0.2000	0	101.7	80	120	11/02/2022
Cobalt		0.0010		<b>0.511</b>	0.5000	0	102.2	80	120	11/02/2022
Lead		0.0010		<b>0.489</b>	0.5000	0	97.9	80	120	11/02/2022
Lithium	*	0.0030		<b>0.501</b>	0.5000	0	100.3	80	120	11/02/2022
Molybdenum		0.0015		<b>0.511</b>	0.5000	0	102.3	80	120	11/02/2022
Selenium		0.0010		<b>0.466</b>	0.5000	0	93.1	80	120	11/02/2022
Thallium		0.0020		<b>0.242</b>	0.2500	0	96.9	80	120	11/02/2022

Batch 199551      SampType: MS      Units mg/L  
 SampID: 22101765-002CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		<b>0.548</b>	0.5000	0	109.6	75	125	11/02/2022
Arsenic		0.0010		<b>0.548</b>	0.5000	0	109.6	75	125	11/02/2022
Barium		0.0010		<b>2.14</b>	2.000	0.05764	104.2	75	125	11/02/2022
Beryllium		0.0010		<b>0.0530</b>	0.0500	0	105.9	75	125	11/02/2022
Boron		0.0250		<b>0.517</b>	0.5000	0.02493	98.5	75	125	11/03/2022
Cadmium		0.0010		<b>0.0517</b>	0.0500	0	103.4	75	125	11/02/2022
Chromium		0.0015	B	<b>0.171</b>	0.2000	0.0008553	84.9	75	125	11/03/2022
Cobalt		0.0010		<b>0.526</b>	0.5000	0	105.1	75	125	11/02/2022
Lead		0.0010		<b>0.512</b>	0.5000	0.0008973	102.1	75	125	11/02/2022
Lithium	*	0.0030		<b>0.561</b>	0.5000	0.009828	110.2	75	125	11/02/2022
Molybdenum		0.0015		<b>0.540</b>	0.5000	0	108.0	75	125	11/02/2022
Selenium		0.0010		<b>0.490</b>	0.5000	0	98.1	75	125	11/02/2022
Thallium		0.0020		<b>0.256</b>	0.2500	0	102.2	75	125	11/02/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22101765

Client Project: Vistra Baldwin

Report Date: 02-Dec-22

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

Batch 199551		SampType: MSD		Units mg/L				RPD Limit: 20			Date Analyzed
SampID: 22101765-002CMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Antimony		0.0010		<b>0.508</b>	0.5000	0	101.5	0.5479	7.65	11/02/2022	
Arsenic		0.0010		<b>0.501</b>	0.5000	0	100.2	0.5480	8.96	11/02/2022	
Barium		0.0010		<b>2.02</b>	2.000	0.05764	98.2	2.141	5.78	11/02/2022	
Beryllium		0.0010		<b>0.0485</b>	0.0500	0	97.1	0.05297	8.72	11/02/2022	
Boron		0.0250		<b>0.519</b>	0.5000	0.02493	98.7	0.5174	0.23	11/03/2022	
Cadmium		0.0010		<b>0.0482</b>	0.0500	0	96.3	0.05168	7.07	11/02/2022	
Chromium		0.0015	B	<b>0.182</b>	0.2000	0.0008553	90.4	0.1707	6.24	11/03/2022	
Cobalt		0.0010		<b>0.478</b>	0.5000	0	95.7	0.5255	9.40	11/02/2022	
Lead		0.0010		<b>0.491</b>	0.5000	0.0008973	98.0	0.5116	4.16	11/02/2022	
Lithium	*	0.0030		<b>0.514</b>	0.5000	0.009828	100.9	0.5610	8.69	11/02/2022	
Molybdenum		0.0015		<b>0.504</b>	0.5000	0	100.9	0.5398	6.81	11/02/2022	
Selenium		0.0010		<b>0.450</b>	0.5000	0	90.0	0.4904	8.62	11/02/2022	
Thallium		0.0020		<b>0.237</b>	0.2500	0	94.7	0.2555	7.60	11/02/2022	

Batch 199700		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-199700											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chromium		0.0015		< <b>0.0015</b>	0.0007	0	0	-100	100	11/08/2022	
Selenium		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	11/08/2022	

Batch 199700		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-199700											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chromium		0.0015		<b>0.217</b>	0.2000	0	108.3	80	120	11/08/2022	
Selenium		0.0010		<b>0.516</b>	0.5000	0	103.2	80	120	11/08/2022	

### SW-846 7470A (TOTAL)

Batch 199620		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-199620											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		< <b>0.00020</b>	0.0001	0	0	-100	100	11/03/2022	

Batch 199620		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-199620											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00521</b>	0.0050	0	104.1	85	115	11/03/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22101765

Client Project: Vistra Baldwin

Report Date: 02-Dec-22

### SW-846 7470A (TOTAL)

Batch 199620		SampType: MS		Units mg/L							Date Analyzed
SampID: 22101765-005DMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00505</b>	0.0050	0	101.0	75	125	11/03/2022	

Batch 199620		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 22101765-005DMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Mercury		0.00020		<b>0.00514</b>	0.0050	0	102.9	0.005051	1.84	11/03/2022		

Batch 200141		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-200141											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>&lt; 0.00020</b>	0.0001	0	0	-100	100	11/16/2022	

Batch 200141		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-200141											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00510</b>	0.0050	0	102.0	85	115	11/17/2022	

Batch 200141		SampType: MS		Units mg/L							Date Analyzed
SampID: 22101765-004CMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00963</b>	0.0100	0	96.3	75	125	11/17/2022	

Batch 200141		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 22101765-004CMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Mercury		0.00020		<b>0.00912</b>	0.0100	0	91.2	0.009628	5.39	11/17/2022		



# Receiving Check List

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

Client: Ramboll

Work Order: 22101765

Client Project: Vistra Baldwin

Report Date: 02-Dec-22

Carrier: Tim Mathis

Received By: PRY

Completed by:

Reviewed by:

On:

27-Oct-22

Payton Yoch

On:

27-Oct-22

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

- |   |   |   |  |                                  |
|---|---|---|--|----------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             | Not Present <input type="checkbox"/>   | Temp °C <b>2.6</b>               |
| Type of thermal preservation?                           | None <input type="checkbox"/>           | Ice <input checked="" type="checkbox"/> | Blue Ice <input type="checkbox"/>      | Dry Ice <input type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Reported field parameters measured:                     | Field <input type="checkbox"/>          | Lab <input type="checkbox"/>            | NA <input checked="" type="checkbox"/> |                                  |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |

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

- |   |                              |  |   |
|---|------------------------------|--|---|
| Water – at least one vial per sample has zero headspace?  | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | No VOA vials <input checked="" type="checkbox"/>      |
| Water - TOX containers have zero headspace?               | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | No TOX containers <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt?                       | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | NA <input type="checkbox"/>                           |
| NPDES/CWA TCN interferences checked/treated in the field? | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | NA <input checked="" type="checkbox"/>                |

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

pH strip 83856 - pyoch - 10/27/2022 8:46:06 AM

Additional Nitric Acid (83726) was needed in MW-304 upon arrival at the laboratory. - pyoch - 10/27/2022 8:46:15 AM

# CHAIN OF CUSTODY

pg. 1 of 1 Work order # 22101765

**TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005**

**Client:** Ramboll  
**Address:** 300 S. Wacker Drive  
**City / State / Zip:** Chicago, IL 60606  
**Contact:** Evan Plank **Phone:** (414) 837-3687  
**E-Mail:** Evan.Plank@ramboll.com **Fax:** \_\_\_\_\_

**Samples on:**  ICE  BLUE ICE  NO ICE 2.6 °C **LTG#** 6  
**Preserved in:**  LAB  FIELD **FOR LAB USE ONLY**  
**Lab Notes:** PHU 83856, Added HNO3 (83726) to sample MW-304. PNT 10/27/22

Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No  
 Are these samples known to be hazardous?  Yes  No  
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section.  Yes  No

**Client Comments:**  
 Part 845 metals: antimony, arsenic, barium, beryllium, boron, cadmium, chromium, cobalt, lead, lithium, mercury, molybdenum, selenium, and thallium (6020, 7470A)

<b>Project Name/Number</b> <u>Vistra Baldwin</u>	<b>Sample Collector's Name</b> <u>Andrew Handwick</u> <u>SAMMY MALLOW</u>	<b>MATRIX</b>	<b>INDICATE ANALYSIS REQUESTED</b>							
<b>Results Requested</b> <input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)	<b>Billing Instructions</b>	<b># and Type of Containers</b>	<b>COURIER</b>							
<b>Lab Use Only</b>		<table border="1" style="width: 100%; border-collapse: collapse; font-size: 0.8em;"> <tr> <td>UNPRES</td> <td>HNO3</td> <td>NaOH</td> <td>H2SO4</td> <td>HCL</td> <td>MeOH</td> <td>NaHSO4</td> <td>OTHER</td> </tr> </table>		UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4
UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER			

Lab Use Only	Sample Identification	Date/Time Sampled	UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	ALK B/ALK C	Ca K Mg Na	Chloride Sulfate	Fe / Mn	Fluoride TDS	Part 845 Metals	Rad26/228 (SUB)	Strontium
	MW-305	10/25/22 15:36	2	1												X	X	X	X			X		
002	MW-203	10/25/22 16:46	2	1												X	X	X	X			X		
003	MW-204	10/26/22 10:18	2	1												X	X	X	X			X		
004	MW-307	10/26/22 12:25	2	1												X	X	X	X			X		
005	MW-304	10/26/22 14:00	2	3												X	X	X	X	X	X	X	X	X
006	KPW02	10/26/22 16:35	2	3												X	X	X	X	X	X	X	X	X
007	KPW05	10/26/22 13:33	2	3												X	X	X	X	X	X	X	X	X
008	EB-01	10/25/22 18:13		1								X										X		

Relinquished By	Date/Time	Received By	Date/Time
<u>SAMMY MALLOW</u> (RAMBOLL)	10/26/22 3:20 pm	<u>[Signature]</u>	10-26 3:20 pm
<u>[Signature]</u>	10-26 4:06 pm	<u>[Signature]</u>	10/26/22 1606
	10-27-22 0645		10/27/22 0645

## TEKLAB, Inc.

Sample Delivery Group: L1552394  
Samples Received: 11/01/2022  
Project Number: 22101765  
Description:  
Site: 001  
Report To: Elizabeth Hurley  
5445 Horseshoe Lake Road  
Collinsville, IL 62234

Entire Report Reviewed By:



Mark W. Beasley  
Project Manager

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

Pace Analytical National

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

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# SAMPLE SUMMARY

## 22101765-005 L1552394-01 Non-Potable Water

Collected by: A Hardwick/ S Mallow  
 Collected date/time: 10/26/22 14:00  
 Received date/time: 11/01/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1954645	1	11/08/22 10:12	11/28/22 11:05	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1952855	1	11/03/22 11:17	11/28/22 11:05	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1952855	1	11/03/22 11:17	11/07/22 17:10	RGT	Mt. Juliet, TN

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

## 22101765-006 L1552394-02 Non-Potable Water

Collected by: A Hardwick/ S Mallow  
 Collected date/time: 10/26/22 10:35  
 Received date/time: 11/01/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1954645	1	11/08/22 10:12	11/28/22 11:05	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1952855	1	11/03/22 11:17	11/28/22 11:05	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1952855	1	11/03/22 11:17	11/07/22 17:10	RGT	Mt. Juliet, TN

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

## 22101765-007 L1552394-03 Non-Potable Water

Collected by: A Hardwick/ S Mallow  
 Collected date/time: 10/26/22 13:33  
 Received date/time: 11/01/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1954645	1	11/08/22 10:12	11/28/22 11:05	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1952855	1	11/03/22 11:17	11/28/22 11:05	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1952855	1	11/03/22 11:17	11/07/22 17:10	RGT	Mt. Juliet, TN

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

# CASE NARRATIVE

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



Mark W. Beasley  
Project Manager

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.615		0.189	0.331	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Barium	96.7			30.0-143	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Yttrium	99.7			30.0-136	11/28/2022 11:05	<a href="#">WG1954645</a>

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.693		0.287	0.489	11/28/2022 11:05	<a href="#">WG1952855</a>

<sup>4</sup>Cn

<sup>5</sup>Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0780	<u>U</u>	0.216	0.360	11/07/2022 17:10	<a href="#">WG1952855</a>
(T) Barium-133	91.5			30.0-143	11/07/2022 17:10	<a href="#">WG1952855</a>

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.501		0.182	0.323	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Barium	100			30.0-143	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Yttrium	105			30.0-136	11/28/2022 11:05	<a href="#">WG1954645</a>

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.992		0.334	0.413	11/28/2022 11:05	<a href="#">WG1952855</a>

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.491		0.280	0.258	11/07/2022 17:10	<a href="#">WG1952855</a>
(T) Barium-133	94.9			30.0-143	11/07/2022 17:10	<a href="#">WG1952855</a>

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.358	J	0.208	0.378	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Barium	85.6			30.0-143	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Yttrium	114			30.0-136	11/28/2022 11:05	<a href="#">WG1954645</a>

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.491		0.265	0.440	11/28/2022 11:05	<a href="#">WG1952855</a>

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.133	J	0.164	0.226	11/07/2022 17:10	<a href="#">WG1952855</a>
(T) Barium-133	90.2			30.0-143	11/07/2022 17:10	<a href="#">WG1952855</a>

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3866180-1 11/28/22 11:05

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-228	0.0761	<u>U</u>	0.143	0.265
(T) Barium	102		102	
(T) Yttrium	106		106	

L1547148-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1547148-11 11/28/22 11:05 • (DUP) R3866180-5 11/28/22 11:05

Analyte	Original Result pCi/l	Original Uncertainty + / -	Original MDA pCi/l	DUP Result pCi/l	DUP Uncertainty + / -	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.252	0.212	0.389	0.652	0.273	0.389	1	88.5	1.16		20	3
(T) Barium	86.2			102	102							
(T) Yttrium	98.1			107	107							

Laboratory Control Sample (LCS)

(LCS) R3866180-2 11/28/22 11:05

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.56	111	80.0-120	
(T) Barium			77.2		
(T) Yttrium			106		

L1547970-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1547970-01 11/28/22 11:05 • (MS) R3866180-3 11/28/22 11:05 • (MSD) R3866180-4 11/28/22 11:05

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	10.0	-0.144	9.63	9.91	96.3	99.1	1	70.0-130			2.93		20
(T) Barium		85.5			91.3	81.0							
(T) Yttrium		102			100	107							

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3864136-1 11/07/22 17:10

Analyte	MB Result	MB Qualifier	MB Uncertainty	MB MDA
	pCi/l		+ / -	pCi/l
Radium-226	-0.0157	<u>U</u>	0.0230	0.0685
(T) Barium-133	93.5		93.5	

L1546122-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1546122-01 11/07/22 17:10 • (DUP) R3864136-5 11/07/22 17:10

Analyte	Original Result	Original Uncertainty	Original MDA	DUP Result	DUP Uncertainty	DUP MDA	Dilution	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	+ / -	pCi/l		%			%	
Radium-226	1.28	0.432	0.265	1.47	0.421	0.265	1	14.1	0.320		20	3
(T) Barium-133	94.6			94.4	94.4							

Laboratory Control Sample (LCS)

(LCS) R3864136-2 11/07/22 17:10

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-226	5.02	5.23	104	80.0-120	
(T) Barium-133			96.7		

L1552394-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1552394-03 11/07/22 17:10 • (MS) R3864136-3 11/07/22 17:10 • (MSD) R3864136-4 11/07/22 17:10

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-226	20.0	0.133	21.6	21.4	107	106	1	75.0-125			0.605		20
(T) Barium-133		90.2			93.0	91.7							

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

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

### Abbreviations and Definitions

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

### Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



# ACCREDITATIONS & LOCATIONS

## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Sample Receipt Checklist

COC Seal Present/Intact:  Y  N If Applicable  
 COC Signed/Accurate:  Y  N VOA Zero Headspace:  Y  N  
 Bottles arrive intact:  Y  N Pres. Correct/Check:  Y  N  
 Correct bottles used:  Y  N  
 Sufficient volume sent:  Y  N  
 RAD Screen <0.5 mR/hr:  Y  N

**TEKLAB, INC. Chain of Custody**

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

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

Teklab Inc  
 5445 Horseshoe Lake Road  
 Collinsville, IL 62234

Cooler Temp:  Sampler:  QC Level:

Comments:   
 Please analyze for Radium 226/228 on your standard turn around time.  
 Samples collected from an IL site.  
 Batch QC is required for all analyses requested. EDD requested..

Project#

Contact:   
 Requested Due Date:

Email:   
 Billing/PO:

Phone:

**B070**  
 4552394

**PLEASE NOTE:**

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

Ra226/228	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix
-01	22101765-005	10/26/22 1400	HNO3	Groundwater
-02	22101765-006	10/26/22 1035	HNO3	Groundwater
-03	22101765-007	10/26/22 1333	HNO3	Groundwater
			HNO3	Groundwater
			HNO3	Groundwater
			HNO3	Groundwater
			HNO3	Groundwater
			HNO3	Groundwater
			HNO3	Groundwater
			HNO3	Groundwater
			HNO3	Groundwater

*Relinquished By	Date/Time	Received By	Date/Time
		<i>Snake Morris</i>	11.1.22 0900

December 16, 2022

Evvan Plank  
Ramboll  
300 S. Wacker Drive  
Suite 130  
Chicago, IL 60606  
TEL: (414) 837-3687  
FAX: (414) 837-3608



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

**RE:** Vistra Baldwin

**WorkOrder:** 22101833

Dear Evvan Plank:

TEKLAB, INC received 13 samples on 10/28/2022 7:20:00 AM for the analysis presented in the following report.

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

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

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

Sincerely,



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



## Report Contents

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

**Client:** Ramboll

**Work Order:** 22101833

**Client Project:** Vistra Baldwin

**Report Date:** 16-Dec-22

**This reporting package includes the following:**

Cover Letter	1
Report Contents	2
Definitions	3
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Laboratory Results	7
Sample Summary	20
Dates Report	21
Quality Control Results	27
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Chain of Custody	Appended

**Client:** Ramboll

**Work Order:** 22101833

**Client Project:** Vistra Baldwin

**Report Date:** 16-Dec-22

### 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)

**Client:** Ramboll

**Work Order:** 22101833

**Client Project:** Vistra Baldwin

**Report Date:** 16-Dec-22

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### Qualifiers

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



# Case Narrative

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

**Client:** Ramboll

**Work Order:** 22101833

**Client Project:** Vistra Baldwin

**Report Date:** 16-Dec-22

**Cooler Receipt Temp:** 2.4 °C

Radium-226 and Radium-228 analysis was performed by Pace Analytical National. See attached report for results.

This report was revised on December 16, 2022 per Eric Bauer's request. The reason for the revision is to correct the date/time of collection for XPW06 (22101833-013) within the subcontracting report. Please replace report dated December 7, 2022 with this report. EAH 12/16/22

## Locations

### Collinsville

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

### Collinsville Air

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

### Springfield

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

### Chicago

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

### Kansas City

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



## Accreditations

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

**Client:** Ramboll

**Work Order:** 22101833

**Client Project:** Vistra Baldwin

**Report Date:** 16-Dec-22

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





## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101833-001  
 Matrix: GROUNDWATER

Work Order: 22101833  
 Report Date: 16-Dec-22

Client Sample ID: XPW01

Collection Date: 10/26/2022 15:14

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		203	mg/L	1	11/02/2022 9:48	R320505
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/02/2022 9:48	R320505
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		406	mg/L	1	10/28/2022 15:55	R320333
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		98	mg/L	5	11/03/2022 21:21	R320580
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.61	mg/L	1	11/02/2022 13:07	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		21	mg/L	1	11/03/2022 12:47	R320588
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		65.4	mg/L	1	11/03/2022 16:08	199618
Magnesium	NELAP	0.0500		16.3	mg/L	1	11/03/2022 16:08	199618
Potassium	NELAP	0.100		9.04	mg/L	1	11/03/2022 16:08	199618
Sodium	NELAP	0.0500		29.1	mg/L	1	11/03/2022 16:08	199618
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 11:37	199618
Arsenic	NELAP	0.0010	J	0.0005	mg/L	5	11/03/2022 11:37	199618
Barium	NELAP	0.0010		0.104	mg/L	5	11/03/2022 11:37	199618
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 11:37	199618
Boron	NELAP	0.0250		0.930	mg/L	5	11/03/2022 11:37	199618
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 11:37	199618
Chromium	NELAP	0.0015	B	< 0.0015	mg/L	5	11/04/2022 12:29	199618
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 11:37	199618
Iron	NELAP	0.0250		1.29	mg/L	5	11/10/2022 11:23	199809
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 11:37	199618
Lithium	*	0.0030		0.0142	mg/L	5	11/03/2022 11:37	199618
Manganese	NELAP	0.0020	B	0.107	mg/L	5	11/04/2022 12:29	199618
Molybdenum	NELAP	0.0015	B	0.0464	mg/L	5	11/04/2022 12:29	199618
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 11:37	199618
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/03/2022 11:37	199618
<i>Sample result(s) for Mn and Mo exceed 10 times the MBLK contamination. Data is reportable per the TNI Standard.</i>								
<i>Contamination present in the MBLK for Cr. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/03/2022 10:40	199620
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/19/2022 0:00	R322024



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101833-002  
 Matrix: GROUNDWATER

Work Order: 22101833  
 Report Date: 16-Dec-22

Client Sample ID: DUP-01

Collection Date: 10/26/2022 15:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		199	mg/L	1	11/02/2022 9:59	R320505
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/02/2022 9:59	R320505
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		396	mg/L	1	10/28/2022 15:56	R320333
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		94	mg/L	5	11/03/2022 21:26	R320580
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.61	mg/L	1	11/02/2022 13:09	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		21	mg/L	1	11/03/2022 12:54	R320588
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		65.3	mg/L	1	11/03/2022 16:10	199618
Magnesium	NELAP	0.0500		16.3	mg/L	1	11/03/2022 16:10	199618
Potassium	NELAP	0.100		9.14	mg/L	1	11/03/2022 16:10	199618
Sodium	NELAP	0.0500		29.4	mg/L	1	11/03/2022 16:10	199618
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:08	199618
Arsenic	NELAP	0.0010	J	0.0004	mg/L	5	11/03/2022 12:08	199618
Barium	NELAP	0.0010		0.0907	mg/L	5	11/03/2022 12:08	199618
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:08	199618
Boron	NELAP	0.0250		0.838	mg/L	5	11/03/2022 12:08	199618
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 18:47	199618
Chromium	NELAP	0.0015	B	< 0.0015	mg/L	5	11/04/2022 12:35	199618
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 12:35	199618
Iron	NELAP	0.0250		1.46	mg/L	5	11/10/2022 11:28	199809
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:08	199618
Lithium	*	0.0030		0.0130	mg/L	5	11/03/2022 12:08	199618
Manganese	NELAP	0.0020	B	0.104	mg/L	5	11/04/2022 12:35	199618
Molybdenum	NELAP	0.0015	B	0.0434	mg/L	5	11/04/2022 12:35	199618
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:08	199618
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/03/2022 12:08	199618
<i>Sample result(s) for Mn and Mo exceed 10 times the MBLK contamination. Data is reportable per the TNI Standard.</i>								
<i>Contamination present in the MBLK for Cr. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/03/2022 10:42	199620
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/19/2022 0:00	R322024



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101833-003  
 Matrix: GROUNDWATER

Work Order: 22101833  
 Report Date: 16-Dec-22  
 Client Sample ID: MW-306  
 Collection Date: 10/26/2022 17:05

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		0	mg/L	1	11/02/2022 10:04	R320505
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		22	mg/L	1	11/02/2022 10:04	R320505
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		292	mg/L	1	10/28/2022 15:56	R320333
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50	S	53	mg/L	5	11/03/2022 13:16	R320580
<i>Matrix spike did not recover within control limits. Result is verified by reanalysis at dilution.</i>								
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.59	mg/L	1	11/02/2022 13:11	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		73	mg/L	5	11/03/2022 13:16	R320588
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		32.4	mg/L	1	11/03/2022 16:11	199618
Magnesium	NELAP	0.0500		0.0798	mg/L	1	11/03/2022 16:11	199618
Potassium	NELAP	0.100		1.27	mg/L	1	11/03/2022 16:11	199618
Sodium	NELAP	0.0500		56.7	mg/L	1	11/03/2022 16:11	199618
Strontium	NELAP	0.0100		0.0462	mg/L	1	11/03/2022 16:11	199618
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:15	199618
Arsenic	NELAP	0.0010		0.0023	mg/L	5	11/03/2022 12:15	199618
Barium	NELAP	0.0010		0.0108	mg/L	5	11/03/2022 12:15	199618
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:15	199618
Boron	NELAP	0.0250		0.125	mg/L	5	11/03/2022 12:15	199618
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 18:53	199618
Chromium	NELAP	0.0015	B	< 0.0015	mg/L	5	11/04/2022 12:41	199618
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 12:41	199618
Iron	NELAP	0.0250		0.0730	mg/L	5	11/10/2022 11:32	199809
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:15	199618
Lithium	*	0.0030		0.0105	mg/L	5	11/03/2022 12:15	199618
Manganese	NELAP	0.0020	BJ	0.0012	mg/L	5	11/04/2022 12:41	199618
Molybdenum	NELAP	0.0015		0.0209	mg/L	5	11/10/2022 11:32	199809
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:15	199618
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/03/2022 12:15	199618
<i>Contamination present in the MBLK for Cr and Mn. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/03/2022 10:44	199620
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/19/2022 0:00	R322024



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101833-004  
 Matrix: GROUNDWATER

Work Order: 22101833  
 Report Date: 16-Dec-22  
 Client Sample ID: MW-370  
 Collection Date: 10/27/2022 8:50

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		389	mg/L	1	11/02/2022 10:12	R320505
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	11/02/2022 10:12	R320505
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		2980	mg/L	1	10/28/2022 15:56	R320333
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		250	mg/L	10	11/03/2022 13:43	R320580
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		3.11	mg/L	1	11/02/2022 13:13	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	200		1320	mg/L	50	11/03/2022 13:48	R320588
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		39.6	mg/L	1	11/03/2022 16:13	199618
Magnesium	NELAP	0.0500		22.8	mg/L	1	11/03/2022 16:13	199618
Potassium	NELAP	0.100		5.92	mg/L	1	11/03/2022 16:13	199618
Sodium	NELAP	0.0500		1080	mg/L	1	11/03/2022 16:13	199618
Strontium	NELAP	0.0100		2.23	mg/L	1	11/03/2022 16:13	199618
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0015	mg/L	5	11/03/2022 12:21	199618
Arsenic	NELAP	0.0010	J	0.0007	mg/L	5	11/03/2022 12:21	199618
Barium	NELAP	0.0010		0.0380	mg/L	5	11/03/2022 12:21	199618
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:21	199618
Boron	NELAP	0.0250		1.84	mg/L	5	11/03/2022 12:21	199618
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 19:00	199618
Chromium	NELAP	0.0015	BJ	0.0012	mg/L	5	11/04/2022 12:48	199618
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 12:48	199618
Iron	NELAP	0.0250		0.0315	mg/L	5	11/10/2022 11:37	199809
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:21	199618
Lithium	*	0.0030		0.137	mg/L	5	11/03/2022 12:21	199618
Manganese	NELAP	0.0020		0.0064	mg/L	5	11/10/2022 11:37	199809
Molybdenum	NELAP	0.0015		0.0081	mg/L	5	11/10/2022 11:37	199809
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:21	199618
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/03/2022 12:21	199618
<i>Contamination present in the MBLK for Cr. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/03/2022 10:47	199620
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/19/2022 0:00	R322024



# Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101833-005  
 Matrix: GROUNDWATER

Work Order: 22101833  
 Report Date: 16-Dec-22

Client Sample ID: MW-356

Collection Date: 10/27/2022 10:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		532	mg/L	1	11/02/2022 10:20	R320505
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	11/02/2022 10:20	R320505
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		700	mg/L	1	10/28/2022 15:56	R320333
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		44	mg/L	1	11/03/2022 13:51	R320580
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		2.09	mg/L	1	11/02/2022 13:15	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		31	mg/L	1	11/03/2022 13:50	R320588
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		11.0	mg/L	1	11/03/2022 16:14	199618
Magnesium	NELAP	0.0500		6.88	mg/L	1	11/03/2022 16:14	199618
Potassium	NELAP	0.100		2.60	mg/L	1	11/03/2022 16:14	199618
Sodium	NELAP	0.0500		240	mg/L	1	11/03/2022 16:14	199618
Strontium	NELAP	0.0100		0.450	mg/L	1	11/03/2022 16:14	199618
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:27	199618
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:27	199618
Barium	NELAP	0.0010		0.0260	mg/L	5	11/03/2022 12:27	199618
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:27	199618
Boron	NELAP	0.0250		1.79	mg/L	5	11/03/2022 12:27	199618
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 19:06	199618
Chromium	NELAP	0.0015	B	< 0.0015	mg/L	5	11/04/2022 12:54	199618
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 12:54	199618
Iron	NELAP	0.025	BJ	0.018	mg/L	5	11/04/2022 12:54	199618
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:27	199618
Lithium	*	0.0030		0.0508	mg/L	5	11/03/2022 12:27	199618
Manganese	NELAP	0.0020		0.0031	mg/L	5	11/10/2022 11:41	199809
Molybdenum	NELAP	0.0015		0.0017	mg/L	5	11/10/2022 11:41	199809
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:27	199618
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/03/2022 12:27	199618
<i>Contamination present in the MBLK for Cr and Fe. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	0.00009	mg/L	1	11/03/2022 10:53	199620
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/19/2022 0:00	R322024



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101833-006  
 Matrix: GROUNDWATER

Work Order: 22101833  
 Report Date: 16-Dec-22  
 Client Sample ID: MW-192  
 Collection Date: 10/27/2022 10:02

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		344	mg/L	1	11/02/2022 10:29	R320505
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/02/2022 10:29	R320505
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		534	mg/L	1	10/28/2022 15:57	R320333
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	20		57	mg/L	2	11/07/2022 10:25	R320718
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.46	mg/L	1	11/02/2022 13:19	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		36	mg/L	1	11/03/2022 13:58	R320588
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		56.8	mg/L	1	11/03/2022 16:18	199618
Magnesium	NELAP	0.0500		21.4	mg/L	1	11/03/2022 16:18	199618
Potassium	NELAP	0.100		1.34	mg/L	1	11/03/2022 16:18	199618
Sodium	NELAP	0.0500		88.2	mg/L	1	11/03/2022 16:18	199618
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0025	mg/L	5	11/03/2022 12:34	199618
Arsenic	NELAP	0.0010	J	0.0006	mg/L	5	11/03/2022 12:34	199618
Barium	NELAP	0.0010		0.0739	mg/L	5	11/03/2022 12:34	199618
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:34	199618
Boron	NELAP	0.0250		0.0537	mg/L	5	11/03/2022 12:34	199618
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 19:12	199618
Chromium	NELAP	0.0015	BJ	0.0008	mg/L	5	11/04/2022 13:25	199618
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 13:25	199618
Iron	NELAP	0.0250		0.104	mg/L	5	11/10/2022 11:46	199809
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:34	199618
Lithium	*	0.0030		0.0225	mg/L	5	11/03/2022 12:34	199618
Manganese	NELAP	0.0020	B	0.646	mg/L	5	11/04/2022 13:25	199618
Molybdenum	NELAP	0.0015		0.0047	mg/L	5	11/10/2022 11:46	199809
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:34	199618
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/03/2022 12:34	199618
<i>Sample result(s) for Mn exceed 10 times the MBLK contamination. Data is reportable per the TNI Standard.</i>								
<i>Contamination present in the MBLK for Cr. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/03/2022 11:00	199620
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/19/2022 0:00	R322024



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101833-007  
 Matrix: GROUNDWATER

Work Order: 22101833  
 Report Date: 16-Dec-22  
 Client Sample ID: MW-193  
 Collection Date: 10/27/2022 11:23

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		313	mg/L	1	11/02/2022 10:36	R320505
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/02/2022 10:36	R320505
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		602	mg/L	1	10/28/2022 15:57	R320333
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		148	mg/L	10	11/03/2022 14:12	R320580
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.32	mg/L	1	11/02/2022 13:21	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		38	mg/L	1	11/03/2022 14:06	R320588
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		83.9	mg/L	1	11/03/2022 16:37	199618
Magnesium	NELAP	0.0500		31.4	mg/L	1	11/03/2022 16:37	199618
Potassium	NELAP	0.100		1.23	mg/L	1	11/03/2022 16:37	199618
Sodium	NELAP	0.0500		71.1	mg/L	1	11/03/2022 16:37	199618
Strontium	NELAP	0.0100		0.276	mg/L	1	11/03/2022 16:37	199618
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:40	199618
Arsenic	NELAP	0.0010		0.0021	mg/L	5	11/03/2022 12:40	199618
Barium	NELAP	0.0010		0.0765	mg/L	5	11/03/2022 12:40	199618
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:40	199618
Boron	NELAP	0.0250		0.0473	mg/L	5	11/03/2022 19:19	199618
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 19:19	199618
Chromium	NELAP	0.0015	B	< 0.0015	mg/L	5	11/04/2022 13:32	199618
Cobalt	NELAP	0.0010	J	0.0008	mg/L	5	11/04/2022 13:32	199618
Iron	NELAP	0.0250		1.46	mg/L	5	11/10/2022 11:50	199809
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:40	199618
Lithium	*	0.0030		0.0061	mg/L	5	11/03/2022 12:40	199618
Manganese	NELAP	0.0020	B	0.758	mg/L	5	11/04/2022 13:32	199618
Molybdenum	NELAP	0.0015	J	0.0015	mg/L	5	11/10/2022 11:50	199809
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:40	199618
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/03/2022 12:40	199618
<i>Sample result(s) for Mn exceed 10 times the MBLK contamination. Data is reportable per the TNI Standard.</i>								
<i>Contamination present in the MBLK for Cr. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/03/2022 11:03	199620
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/19/2022 0:00	R322024



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101833-008  
 Matrix: GROUNDWATER

Work Order: 22101833  
 Report Date: 16-Dec-22  
 Client Sample ID: MW-194  
 Collection Date: 10/27/2022 13:47

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		304	mg/L	1	11/02/2022 10:43	R320505
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/02/2022 10:43	R320505
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		550	mg/L	1	10/28/2022 15:57	R320333
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		125	mg/L	10	11/03/2022 14:33	R320580
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.31	mg/L	1	11/02/2022 13:23	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		30	mg/L	1	11/03/2022 14:14	R320588
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		83.5	mg/L	1	11/03/2022 16:38	199618
Magnesium	NELAP	0.0500		31.9	mg/L	1	11/03/2022 16:38	199618
Potassium	NELAP	0.100		1.07	mg/L	1	11/03/2022 16:38	199618
Sodium	NELAP	0.0500		49.9	mg/L	1	11/03/2022 16:38	199618
Strontium	NELAP	0.0100		0.288	mg/L	1	11/03/2022 16:38	199618
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0011	mg/L	5	11/03/2022 12:46	199618
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:46	199618
Barium	NELAP	0.0010		0.0642	mg/L	5	11/03/2022 12:46	199618
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:46	199618
Boron	NELAP	0.025	J	0.022	mg/L	5	11/03/2022 12:46	199618
Cadmium	NELAP	0.0010	J	0.0002	mg/L	5	11/03/2022 19:25	199618
Chromium	NELAP	0.0015	BJ	0.0008	mg/L	5	11/04/2022 13:38	199618
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 13:38	199618
Iron	NELAP	0.025	J	0.022	mg/L	5	11/10/2022 11:55	199809
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:46	199618
Lithium	*	0.0030		0.0109	mg/L	5	11/03/2022 12:46	199618
Manganese	NELAP	0.0020	B	0.541	mg/L	5	11/04/2022 13:38	199618
Molybdenum	NELAP	0.0015		0.0027	mg/L	5	11/10/2022 11:55	199809
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:46	199618
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/03/2022 12:46	199618
<i>Sample result(s) for Mn exceed 10 times the MBLK contamination. Data is reportable per the TNI Standard.</i>								
<i>Contamination present in the MBLK for Cr. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/03/2022 11:05	199620
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/19/2022 0:00	R322024





## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101833-009  
 Matrix: GROUNDWATER

Work Order: 22101833  
 Report Date: 16-Dec-22  
 Client Sample ID: MW-392  
 Collection Date: 10/27/2022 12:35

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		446	mg/L	1	11/02/2022 10:50	R320505
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/02/2022 10:50	R320505
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		1270	mg/L	1	10/28/2022 15:57	R320333
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		149	mg/L	10	11/03/2022 14:41	R320580
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		3.19	mg/L	1	11/02/2022 13:40	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	40		334	mg/L	10	11/03/2022 14:41	R320588
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		22.1	mg/L	1	11/03/2022 16:40	199618
Magnesium	NELAP	0.0500		11.6	mg/L	1	11/03/2022 16:40	199618
Potassium	NELAP	0.100		4.08	mg/L	1	11/03/2022 16:40	199618
Sodium	NELAP	0.0500		434	mg/L	1	11/03/2022 16:40	199618
Strontium	NELAP	0.0100		0.599	mg/L	1	11/03/2022 16:40	199618
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0017	mg/L	5	11/03/2022 12:52	199618
Arsenic	NELAP	0.0010	J	0.0009	mg/L	5	11/03/2022 12:52	199618
Barium	NELAP	0.0010		0.0294	mg/L	5	11/03/2022 12:52	199618
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:52	199618
Boron	NELAP	0.0250		1.57	mg/L	5	11/03/2022 12:52	199618
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 13:44	199618
Chromium	NELAP	0.0015	BJ	0.0013	mg/L	5	11/04/2022 13:44	199618
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 13:44	199618
Iron	NELAP	0.0250		0.458	mg/L	5	11/10/2022 12:30	199809
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 12:52	199618
Lithium	*	0.0030		0.0474	mg/L	5	11/03/2022 12:52	199618
Manganese	NELAP	0.0020		0.0172	mg/L	5	11/10/2022 12:30	199809
Molybdenum	NELAP	0.0015		0.0054	mg/L	5	11/10/2022 12:30	199809
Selenium	NELAP	0.0010	J	0.0008	mg/L	5	11/03/2022 12:52	199618
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/03/2022 12:52	199618
<i>Contamination present in the MBLK for Cr. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/04/2022 12:35	199654
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/19/2022 0:00	R322024



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101833-010  
 Matrix: GROUNDWATER

Work Order: 22101833  
 Report Date: 16-Dec-22  
 Client Sample ID: MW-393  
 Collection Date: 10/27/2022 14:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		620	mg/L	1	11/02/2022 10:57	R320505
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		21	mg/L	1	11/02/2022 10:57	R320505
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		1870	mg/L	1	10/28/2022 15:57	R320333
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		285	mg/L	10	11/03/2022 14:49	R320580
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		5.86	mg/L	1	11/02/2022 13:42	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	40		436	mg/L	10	11/03/2022 14:49	R320588
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		8.54	mg/L	1	11/03/2022 16:42	199618
Magnesium	NELAP	0.0500		4.44	mg/L	1	11/03/2022 16:42	199618
Potassium	NELAP	0.100		3.89	mg/L	1	11/03/2022 16:42	199618
Sodium	NELAP	0.0500		724	mg/L	1	11/03/2022 16:42	199618
Strontium	NELAP	0.0100		0.383	mg/L	1	11/03/2022 16:42	199618
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0020	mg/L	5	11/03/2022 13:24	199618
Arsenic	NELAP	0.0010		0.0012	mg/L	5	11/03/2022 13:24	199618
Barium	NELAP	0.0010		0.0218	mg/L	5	11/03/2022 13:24	199618
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:24	199618
Boron	NELAP	0.0250		1.83	mg/L	5	11/03/2022 13:24	199618
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 20:20	199618
Chromium	NELAP	0.0015	BJ	0.0008	mg/L	5	11/04/2022 13:50	199618
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 13:50	199618
Iron	NELAP	0.0250		0.168	mg/L	5	11/10/2022 12:35	199809
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:24	199618
Lithium	*	0.0030		0.0767	mg/L	5	11/03/2022 13:24	199618
Manganese	NELAP	0.0020		0.0071	mg/L	5	11/10/2022 12:35	199809
Molybdenum	NELAP	0.0015		0.0091	mg/L	5	11/10/2022 12:35	199809
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:24	199618
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/03/2022 13:24	199618
<i>Contamination present in the MBLK for Cr. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	0.00014	mg/L	1	11/04/2022 12:37	199654
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/19/2022 0:00	R322024



# Laboratory Results

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

Client: Ramboll

Work Order: 22101833

Client Project: Vistra Baldwin

Report Date: 16-Dec-22

Lab ID: 22101833-011

Client Sample ID: EB-02

Matrix: GROUNDWATER

Collection Date: 10/26/2022 18:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:30	199618
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:30	199618
Barium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:30	199618
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:30	199618
Boron	NELAP	0.0250		< 0.0250	mg/L	5	11/03/2022 13:30	199618
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 20:26	199618
Chromium	NELAP	0.0015	B	< 0.0015	mg/L	5	11/04/2022 13:57	199618
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 13:57	199618
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:30	199618
Lithium	*	0.0030		< 0.0030	mg/L	5	11/03/2022 13:30	199618
Molybdenum	NELAP	0.0015	B	< 0.0015	mg/L	5	11/04/2022 13:57	199618
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:30	199618
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/03/2022 13:30	199618
<i>Contamination present in the MBLK for Cr and Mo. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	0.00006	mg/L	1	11/04/2022 13:02	199654



# Laboratory Results

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

Client: Ramboll

Work Order: 22101833

Client Project: Vistra Baldwin

Report Date: 16-Dec-22

Lab ID: 22101833-012

Client Sample ID: EB-03

Matrix: GROUNDWATER

Collection Date: 10/26/2022 18:50

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:36	199618
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:36	199618
Barium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:36	199618
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:36	199618
Boron	NELAP	0.0250		< 0.0250	mg/L	5	11/03/2022 13:36	199618
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 20:33	199618
Chromium	NELAP	0.0015	B	< 0.0015	mg/L	5	11/04/2022 14:03	199618
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 14:03	199618
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:36	199618
Lithium	*	0.0030		< 0.0030	mg/L	5	11/03/2022 13:36	199618
Molybdenum	NELAP	0.0015	B	< 0.0015	mg/L	5	11/04/2022 14:03	199618
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:36	199618
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/03/2022 13:36	199618
<i>Contamination present in the MBLK for Cr and Mo. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/04/2022 13:05	199654



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101833-013  
 Matrix: GROUNDWATER

Work Order: 22101833  
 Report Date: 16-Dec-22

Client Sample ID: XPW06

Collection Date: 10/26/2022 17:26

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		370	mg/L	1	11/02/2022 11:06	R320505
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/02/2022 11:06	R320505
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		855	mg/L	2.5	10/31/2022 12:58	R320391
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	500		575	mg/L	50	11/07/2022 10:41	R320718
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.58	mg/L	1	11/02/2022 13:45	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		25	mg/L	1	11/03/2022 14:54	R320588
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100	S	130	mg/L	1	11/03/2022 16:43	199618
Magnesium	NELAP	0.0500	S	30.0	mg/L	1	11/03/2022 16:43	199618
Potassium	NELAP	1.00	S	18.4	mg/L	10	11/04/2022 8:46	199618
Sodium	NELAP	0.0500	S	87.4	mg/L	1	11/03/2022 16:43	199618
<i>Matrix spike control limits for K are not applicable due to high sample/spike ratio.</i>								
<i>Matrix spike control limits for Ca, Mg, and Na are not applicable due to high sample/spike ratio.</i>								
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:42	199618
Arsenic	NELAP	0.0010		0.0025	mg/L	5	11/03/2022 13:42	199618
Barium	NELAP	0.0010		0.274	mg/L	5	11/03/2022 13:42	199618
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:42	199618
Boron	NELAP	0.0250		2.29	mg/L	5	11/04/2022 14:09	199618
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 20:45	199618
Chromium	NELAP	0.0015	B	< 0.0015	mg/L	5	11/04/2022 14:09	199618
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 14:09	199618
Iron	NELAP	0.0250	BS	9.69	mg/L	5	11/04/2022 14:09	199618
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/03/2022 13:42	199618
Lithium	*	0.0030		0.0118	mg/L	5	11/03/2022 13:42	199618
Manganese	NELAP	0.0020	B	1.26	mg/L	5	11/04/2022 14:09	199618
Molybdenum	NELAP	0.0015	B	0.0718	mg/L	5	11/04/2022 14:09	199618
Selenium	NELAP	0.0010		0.0042	mg/L	5	11/03/2022 13:42	199618
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/03/2022 13:42	199618
<i>Sample result(s) for Mn, Mo, and Fe exceed 10 times the MBLK contamination. Data is reportable per the TNI Standard.</i>								
<i>Matrix spike control limits for Fe are not applicable due to high sample/spike ratio.</i>								
<i>Contamination present in the MBLK for Cr. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	0.00006	mg/L	1	11/04/2022 13:07	199654
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/15/2022 0:00	R322024



## Sample Summary

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

**Client:** Ramboll

**Work Order:** 22101833

**Client Project:** Vistra Baldwin

**Report Date:** 16-Dec-22

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
22101833-001	XPW01	Groundwater	4	10/26/2022 15:14
22101833-002	DUP-01	Groundwater	4	10/26/2022 15:25
22101833-003	MW-306	Groundwater	4	10/26/2022 17:05
22101833-004	MW-370	Groundwater	4	10/27/2022 8:50
22101833-005	MW-356	Groundwater	4	10/27/2022 10:00
22101833-006	MW-192	Groundwater	4	10/27/2022 10:02
22101833-007	MW-193	Groundwater	4	10/27/2022 11:23
22101833-008	MW-194	Groundwater	4	10/27/2022 13:47
22101833-009	MW-392	Groundwater	4	10/27/2022 12:35
22101833-010	MW-393	Groundwater	4	10/27/2022 14:25
22101833-011	EB-02	Groundwater	1	10/26/2022 18:45
22101833-012	EB-03	Groundwater	1	10/26/2022 18:50
22101833-013	XPW06	Groundwater	4	10/26/2022 17:26



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22101833

**Client Project:** Vistra Baldwin

**Report Date:** 16-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
22101833-001A	XPW01	10/26/2022 15:14	10/28/2022 7:20		
	Standard Methods 2540 C (Total) 1997, 2011				10/28/2022 15:55
	SW-846 9036 (Total)				11/03/2022 21:21
	SW-846 9214 (Total)				11/02/2022 13:07
	SW-846 9251 (Total)				11/03/2022 12:47
22101833-001B	XPW01	10/26/2022 15:14	10/28/2022 7:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/02/2022 9:48
	Standard Methods 2320 B 1997, 2011				11/02/2022 9:48
22101833-001C	XPW01	10/26/2022 15:14	10/28/2022 7:20		
	See Attached for Subcontracting Analysis				11/19/2022 0:00
22101833-001D	XPW01	10/26/2022 15:14	10/28/2022 7:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/02/2022 12:51	11/03/2022 16:08
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 11:37
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 18:41
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/04/2022 12:29
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/09/2022 18:28
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/10/2022 11:23
	SW-846 7470A (Total)			11/02/2022 13:53	11/03/2022 10:40
22101833-002A	DUP-01	10/26/2022 15:25	10/28/2022 7:20		
	Standard Methods 2540 C (Total) 1997, 2011				10/28/2022 15:56
	SW-846 9036 (Total)				11/03/2022 21:26
	SW-846 9214 (Total)				11/02/2022 13:09
	SW-846 9251 (Total)				11/03/2022 12:54
22101833-002B	DUP-01	10/26/2022 15:25	10/28/2022 7:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/02/2022 9:59
	Standard Methods 2320 B 1997, 2011				11/02/2022 9:59
22101833-002C	DUP-01	10/26/2022 15:25	10/28/2022 7:20		
	See Attached for Subcontracting Analysis				11/19/2022 0:00
22101833-002D	DUP-01	10/26/2022 15:25	10/28/2022 7:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/02/2022 12:51	11/03/2022 16:10
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 12:08
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 18:47
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/04/2022 12:35
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/09/2022 18:34
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/10/2022 11:28
	SW-846 7470A (Total)			11/02/2022 13:53	11/03/2022 10:42



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22101833

**Client Project:** Vistra Baldwin

**Report Date:** 16-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
22101833-003A	MW-306	10/26/2022 17:05	10/28/2022 7:20		
	Standard Methods 2540 C (Total) 1997, 2011				10/28/2022 15:56
	SW-846 9036 (Total)				11/03/2022 13:16
	SW-846 9214 (Total)				11/02/2022 13:11
	SW-846 9251 (Total)				11/03/2022 13:16
22101833-003B	MW-306	10/26/2022 17:05	10/28/2022 7:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/02/2022 10:04
	Standard Methods 2320 B 1997, 2011				11/02/2022 10:04
22101833-003C	MW-306	10/26/2022 17:05	10/28/2022 7:20		
	See Attached for Subcontracting Analysis				11/19/2022 0:00
22101833-003D	MW-306	10/26/2022 17:05	10/28/2022 7:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/02/2022 12:51	11/03/2022 16:11
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 12:15
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 18:53
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/04/2022 12:41
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/09/2022 18:41
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/10/2022 11:32
	SW-846 7470A (Total)			11/02/2022 13:53	11/03/2022 10:44
22101833-004A	MW-370	10/27/2022 8:50	10/28/2022 7:20		
	Standard Methods 2540 C (Total) 1997, 2011				10/28/2022 15:56
	SW-846 9036 (Total)				11/03/2022 13:43
	SW-846 9214 (Total)				11/02/2022 13:13
	SW-846 9251 (Total)				11/03/2022 13:48
22101833-004B	MW-370	10/27/2022 8:50	10/28/2022 7:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/02/2022 10:12
	Standard Methods 2320 B 1997, 2011				11/02/2022 10:12
22101833-004C	MW-370	10/27/2022 8:50	10/28/2022 7:20		
	See Attached for Subcontracting Analysis				11/19/2022 0:00
22101833-004D	MW-370	10/27/2022 8:50	10/28/2022 7:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/02/2022 12:51	11/03/2022 16:13
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 12:21
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 19:00
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/04/2022 12:48
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/09/2022 18:47
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/10/2022 11:37
	SW-846 7470A (Total)			11/02/2022 13:53	11/03/2022 10:47





## Dates Report

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

**Client:** Ramboll

**Work Order:** 22101833

**Client Project:** Vistra Baldwin

**Report Date:** 16-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
22101833-005A	MW-356	10/27/2022 10:00	10/28/2022 7:20		
	Standard Methods 2540 C (Total) 1997, 2011				10/28/2022 15:56
	SW-846 9036 (Total)				11/03/2022 13:51
	SW-846 9214 (Total)				11/02/2022 13:15
	SW-846 9251 (Total)				11/03/2022 13:50
22101833-005B	MW-356	10/27/2022 10:00	10/28/2022 7:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/02/2022 10:20
	Standard Methods 2320 B 1997, 2011				11/02/2022 10:20
22101833-005C	MW-356	10/27/2022 10:00	10/28/2022 7:20		
	See Attached for Subcontracting Analysis				11/19/2022 0:00
22101833-005D	MW-356	10/27/2022 10:00	10/28/2022 7:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/02/2022 12:51	11/03/2022 16:14
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 12:27
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 19:06
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/04/2022 12:54
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/09/2022 18:53
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/10/2022 11:41
	SW-846 7470A (Total)			11/02/2022 13:53	11/03/2022 10:53
22101833-006A	MW-192	10/27/2022 10:02	10/28/2022 7:20		
	Standard Methods 2540 C (Total) 1997, 2011				10/28/2022 15:57
	SW-846 9036 (Total)				11/07/2022 10:25
	SW-846 9214 (Total)				11/02/2022 13:19
	SW-846 9251 (Total)				11/03/2022 13:58
22101833-006B	MW-192	10/27/2022 10:02	10/28/2022 7:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/02/2022 10:29
	Standard Methods 2320 B 1997, 2011				11/02/2022 10:29
22101833-006C	MW-192	10/27/2022 10:02	10/28/2022 7:20		
	See Attached for Subcontracting Analysis				11/19/2022 0:00
22101833-006D	MW-192	10/27/2022 10:02	10/28/2022 7:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/02/2022 12:51	11/03/2022 16:18
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 12:34
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 19:12
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/04/2022 13:25
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/09/2022 19:00
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/10/2022 11:46
	SW-846 7470A (Total)			11/02/2022 13:53	11/03/2022 11:00



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22101833

**Client Project:** Vistra Baldwin

**Report Date:** 16-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
22101833-007A	MW-193	10/27/2022 11:23	10/28/2022 7:20		
	Standard Methods 2540 C (Total) 1997, 2011				10/28/2022 15:57
	SW-846 9036 (Total)				11/03/2022 14:12
	SW-846 9214 (Total)				11/02/2022 13:21
	SW-846 9251 (Total)				11/03/2022 14:06
22101833-007B	MW-193	10/27/2022 11:23	10/28/2022 7:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/02/2022 10:36
	Standard Methods 2320 B 1997, 2011				11/02/2022 10:36
22101833-007C	MW-193	10/27/2022 11:23	10/28/2022 7:20		
	See Attached for Subcontracting Analysis				11/19/2022 0:00
22101833-007D	MW-193	10/27/2022 11:23	10/28/2022 7:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/02/2022 12:51	11/03/2022 16:37
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 12:40
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 19:19
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/04/2022 13:32
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/09/2022 19:06
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/10/2022 11:50
	SW-846 7470A (Total)			11/02/2022 13:53	11/03/2022 11:03
22101833-008A	MW-194	10/27/2022 13:47	10/28/2022 7:20		
	Standard Methods 2540 C (Total) 1997, 2011				10/28/2022 15:57
	SW-846 9036 (Total)				11/03/2022 14:33
	SW-846 9214 (Total)				11/02/2022 13:23
	SW-846 9251 (Total)				11/03/2022 14:14
22101833-008B	MW-194	10/27/2022 13:47	10/28/2022 7:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/02/2022 10:43
	Standard Methods 2320 B 1997, 2011				11/02/2022 10:43
22101833-008C	MW-194	10/27/2022 13:47	10/28/2022 7:20		
	See Attached for Subcontracting Analysis				11/19/2022 0:00
22101833-008D	MW-194	10/27/2022 13:47	10/28/2022 7:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/02/2022 12:51	11/03/2022 16:38
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 12:46
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 19:25
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/04/2022 13:38
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/09/2022 19:13
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/10/2022 11:55
	SW-846 7470A (Total)			11/02/2022 13:53	11/03/2022 11:05



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22101833

**Client Project:** Vistra Baldwin

**Report Date:** 16-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
22101833-009A	MW-392	10/27/2022 12:35	10/28/2022 7:20		
	Standard Methods 2540 C (Total) 1997, 2011				10/28/2022 15:57
	SW-846 9036 (Total)				11/03/2022 14:41
	SW-846 9214 (Total)				11/02/2022 13:40
	SW-846 9251 (Total)				11/03/2022 14:41
22101833-009B	MW-392	10/27/2022 12:35	10/28/2022 7:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/02/2022 10:50
	Standard Methods 2320 B 1997, 2011				11/02/2022 10:50
22101833-009C	MW-392	10/27/2022 12:35	10/28/2022 7:20		
	See Attached for Subcontracting Analysis				11/19/2022 0:00
22101833-009D	MW-392	10/27/2022 12:35	10/28/2022 7:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/02/2022 12:51	11/03/2022 16:40
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 12:52
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/04/2022 13:44
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/09/2022 19:19
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/10/2022 12:30
	SW-846 7470A (Total)			11/03/2022 9:17	11/04/2022 12:35
22101833-010A	MW-393	10/27/2022 14:25	10/28/2022 7:20		
	Standard Methods 2540 C (Total) 1997, 2011				10/28/2022 15:57
	SW-846 9036 (Total)				11/03/2022 14:49
	SW-846 9214 (Total)				11/02/2022 13:42
	SW-846 9251 (Total)				11/03/2022 14:49
22101833-010B	MW-393	10/27/2022 14:25	10/28/2022 7:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/02/2022 10:57
	Standard Methods 2320 B 1997, 2011				11/02/2022 10:57
22101833-010C	MW-393	10/27/2022 14:25	10/28/2022 7:20		
	See Attached for Subcontracting Analysis				11/19/2022 0:00
22101833-010D	MW-393	10/27/2022 14:25	10/28/2022 7:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/02/2022 12:51	11/03/2022 16:42
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 13:24
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 20:20
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/04/2022 13:50
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/09/2022 21:08
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/08/2022 11:58	11/10/2022 12:35
	SW-846 7470A (Total)			11/03/2022 9:17	11/04/2022 12:37
22101833-011A	EB-02	10/26/2022 18:45	10/28/2022 7:20		



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22101833

**Client Project:** Vistra Baldwin

**Report Date:** 16-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	<b>Test Name</b>				
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 13:30
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 20:26
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/04/2022 13:57
	SW-846 7470A (Total)			11/03/2022 9:17	11/04/2022 13:02
22101833-012A	EB-03	10/26/2022 18:50	10/28/2022 7:20		
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 13:36
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 20:33
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/04/2022 14:03
	SW-846 7470A (Total)			11/03/2022 9:17	11/04/2022 13:05
22101833-013A	XPW06	10/26/2022 17:26	10/28/2022 7:20		
	Standard Methods 2540 C (Total) 1997, 2011				10/31/2022 12:58
	SW-846 9036 (Total)				11/07/2022 10:41
	SW-846 9214 (Total)				11/02/2022 13:45
	SW-846 9251 (Total)				11/03/2022 14:54
22101833-013B	XPW06	10/26/2022 17:26	10/28/2022 7:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/02/2022 11:06
	Standard Methods 2320 B 1997, 2011				11/02/2022 11:06
22101833-013C	XPW06	10/26/2022 17:26	10/28/2022 7:20		
	See Attached for Subcontracting Analysis				11/15/2022 0:00
22101833-013D	XPW06	10/26/2022 17:26	10/28/2022 7:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/02/2022 12:51	11/03/2022 16:43
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/02/2022 12:51	11/04/2022 8:46
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 13:42
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/03/2022 20:45
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/02/2022 12:51	11/04/2022 14:09
	SW-846 7470A (Total)			11/03/2022 9:17	11/04/2022 13:07



## Quality Control Results

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

**Client:** Ramboll

**Work Order:** 22101833

**Client Project:** Vistra Baldwin

**Report Date:** 16-Dec-22

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

Batch R320333		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	10/28/2022
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/28/2022
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/28/2022

Batch R320333		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		964	1000	0	96.4	90	110	10/28/2022
Total Dissolved Solids		20		986	1000	0	98.6	90	110	10/28/2022
Total Dissolved Solids		20		980	1000	0	98.0	90	110	10/28/2022

Batch R320333		SampType: DUP		Units mg/L						
SampID: 22101833-001ADUP										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		412				406.0	1.47	10/28/2022

Batch R320391		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	10/31/2022
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	10/31/2022

Batch R320391		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		962	1000	0	96.2	90	110	10/31/2022
Total Dissolved Solids		20		968	1000	0	96.8	90	110	10/31/2022

Batch R320391		SampType: DUP		Units mg/L						
SampID: 22101833-013ADUP										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		50		845				855.0	1.18	10/31/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22101833

Client Project: Vistra Baldwin

Report Date: 16-Dec-22

### SW-846 9036 (TOTAL)

Batch R320580		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	11/03/2022	

Batch R320580		SampType: LCS		Units mg/L							
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		20	20.00	0	98.4	90	110	11/03/2022	

Batch R320580		SampType: MS		Units mg/L							
SampID: 22101833-003AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		50		138	100.0	52.77	85.6	85	115	11/03/2022	

Batch R320580		SampType: MSD		Units mg/L							
SampID: 22101833-003AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		50	S	137	100.0	52.77	84.1	138.4	1.16	11/03/2022	

Batch R320718		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	11/07/2022	

Batch R320718		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	97.4	90	110	11/07/2022	

Batch R320718		SampType: MS		Units mg/L							
SampID: 22101833-013AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		500		1550	1000	575.2	97.4	85	115	11/07/2022	

Batch R320718		SampType: MSD		Units mg/L							
SampID: 22101833-013AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		500		1580	1000	575.2	100.3	1549	1.86	11/07/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22101833

Client Project: Vistra Baldwin

Report Date: 16-Dec-22

### SW-846 9214 (TOTAL)

Batch R320491		SampType: MBLK		Units mg/L							
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		< 0.10	0.0370	0	0	-100	100	11/02/2022	

Batch R320491		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		1.01	1.000	0	101.3	90	110	11/02/2022	

Batch R320491		SampType: MS		Units mg/L							
SampID: 22101833-008AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.48	2.000	0.3080	108.5	75	125	11/02/2022	

Batch R320491		SampType: MSD		Units mg/L							
SampID: 22101833-008AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.53	2.000	0.3080	111.3	2.478	2.23	11/02/2022	

Batch R320491		SampType: MS		Units mg/L							
SampID: 22101833-013AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.67	2.000	0.5760	104.8	75	125	11/02/2022	

Batch R320491		SampType: MSD		Units mg/L							
SampID: 22101833-013AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.67	2.000	0.5760	104.8	2.673	0.00	11/02/2022	

### SW-846 9251 (TOTAL)

Batch R320588		SampType: MBLK		Units mg/L							
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		< 4	0.5000	0	0	-100	100	11/03/2022	



## Quality Control Results

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

**Client:** Ramboll

**Work Order:** 22101833

**Client Project:** Vistra Baldwin

**Report Date:** 16-Dec-22

**SW-846 9251 (TOTAL)**

Batch R320588		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		<b>20</b>	20.00	0	100.4	90	110	11/03/2022	

Batch R320588		SampType: MS		Units mg/L							
SampID: 22101833-003AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		20		<b>161</b>	100.0	72.66	88.3	85	115	11/03/2022	

Batch R320588		SampType: MSD		Units mg/L						RPD Limit: 15		Date Analyzed
SampID: 22101833-003AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Chloride		20		<b>158</b>	100.0	72.66	85.6	161.0	1.71	11/03/2022		

Batch R320588		SampType: MS		Units mg/L							
SampID: 22101833-013AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		<b>43</b>	20.00	25.14	87.0	85	115	11/03/2022	

Batch R320588		SampType: MSD		Units mg/L						RPD Limit: 15		Date Analyzed
SampID: 22101833-013AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Chloride		4		<b>43</b>	20.00	25.14	87.1	42.54	0.05	11/03/2022		

Batch R320722		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		<b>&lt; 4</b>	0.5000	0	0	-100	100	11/07/2022	

Batch R320722		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		<b>20</b>	20.00	0	101.4	90	110	11/07/2022	





## Quality Control Results

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

Client: Ramboll

Work Order: 22101833

Client Project: Vistra Baldwin

Report Date: 16-Dec-22

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

Batch 199618		SampType: MBLK		Units mg/L							
SampID: MBLK-199618											
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	11/03/2022	
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	11/03/2022	
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	11/03/2022	
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	11/03/2022	
Strontium	*	0.0100		< 0.0100	0.0013	0	0	-100	100	11/03/2022	

Batch 199618		SampType: LCS		Units mg/L							
SampID: LCS-199618											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		2.49	2.500	0	99.6	85	115	11/03/2022	
Magnesium		0.0500		2.43	2.500	0	97.3	85	115	11/03/2022	
Potassium		0.100		2.54	2.500	0	101.5	85	115	11/03/2022	
Sodium		0.0500		2.38	2.500	0	95.2	85	115	11/03/2022	
Strontium	*	0.0100		0.100	0.1000	0	100.2	85	115	11/03/2022	

Batch 199618		SampType: MS		Units mg/L							
SampID: 22101833-013DMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100	S	133	2.500	129.5	132.0	75	125	11/03/2022	
Magnesium		0.0500		32.3	2.500	29.96	92.8	75	125	11/03/2022	
Potassium		1.00	S	18.2	2.500	18.45	-10.2	75	125	11/04/2022	
Sodium		0.0500	S	89.2	2.500	87.44	72.0	75	125	11/03/2022	

Batch 199618		SampType: MSD		Units mg/L						RPD Limit: 20		Date Analyzed
SampID: 22101833-013DMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Calcium		0.100	S	137	2.500	129.5	291.6	132.8	2.96	11/03/2022		
Magnesium		0.0500	S	33.2	2.500	29.96	129.2	32.28	2.78	11/03/2022		
Potassium		1.00	S	18.2	2.500	18.45	-9.9	18.19	0.04	11/04/2022		
Sodium		0.0500	S	92.4	2.500	87.44	200.4	89.24	3.53	11/03/2022		



## Quality Control Results

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

Client: Ramboll

Work Order: 22101833

Client Project: Vistra Baldwin

Report Date: 16-Dec-22

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

Batch 199809		SampType: MBLK		Units mg/L							
SampID: MBLK-199809											
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	11/08/2022	
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	11/08/2022	
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	11/08/2022	
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	11/08/2022	
Strontium	*	0.0100		< 0.0100	0.0013	0	0	-100	100	11/08/2022	

### Batch 199809 SampType: LCS Units mg/L

SampID: LCS-199809										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		2.56	2.500	0	102.4	85	115	11/08/2022
Magnesium		0.0500		2.61	2.500	0	104.4	85	115	11/08/2022
Potassium		0.100		2.55	2.500	0	102.2	85	115	11/08/2022
Sodium		0.0500		2.32	2.500	0	93.0	85	115	11/08/2022
Strontium	*	0.0100		0.103	0.1000	0	103.1	85	115	11/08/2022

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

Batch 199618		SampType: MBLK		Units mg/L							
SampID: MBLK-199618											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	11/03/2022	
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	11/03/2022	
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	11/03/2022	
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	11/03/2022	
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	11/03/2022	
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	11/03/2022	
Chromium		0.0015	S	0.0974	0.0007	0	13920	-100	100	11/04/2022	
Cobalt		0.0010		< 0.0010	0.0008	0	0	-100	100	11/04/2022	
Cobalt		0.0010		< 0.0010	0.0008	0	0	-100	100	11/03/2022	
Iron		0.0250	S	0.412	0.0115	0	3583	-100	100	11/04/2022	
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	11/03/2022	
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	11/03/2022	
Manganese		0.0020	S	0.0095	0.0008	0	1269	-100	100	11/04/2022	
Molybdenum		0.0015	JS	0.0015	0.0006	0	246.1	-100	100	11/03/2022	
Molybdenum		0.0015	S	0.0023	0.0006	0	376.3	-100	100	11/04/2022	
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	11/03/2022	
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	11/03/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22101833

Client Project: Vistra Baldwin

Report Date: 16-Dec-22

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

Batch 199618      SampType: LCS      Units mg/L  
 SampID: LCS-199618

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		<b>0.460</b>	0.5000	0	92.0	80	120	11/03/2022
Arsenic		0.0010		<b>0.482</b>	0.5000	0	96.5	80	120	11/03/2022
Barium		0.0010		<b>1.91</b>	2.000	0	95.6	80	120	11/03/2022
Beryllium		0.0010		<b>0.0461</b>	0.0500	0	92.2	80	120	11/03/2022
Boron		0.0250		<b>0.485</b>	0.5000	0	97.1	80	120	11/03/2022
Cadmium		0.0010		<b>0.0485</b>	0.0500	0	97.0	80	120	11/03/2022
Chromium		0.0015	B	<b>0.192</b>	0.2000	0	96.0	80	120	11/04/2022
Cobalt		0.0010		<b>0.441</b>	0.5000	0	88.3	80	120	11/03/2022
Cobalt		0.0010		<b>0.486</b>	0.5000	0	97.2	80	120	11/04/2022
Iron		0.0250	B	<b>2.11</b>	2.000	0	105.5	80	120	11/04/2022
Lead		0.0010		<b>0.458</b>	0.5000	0	91.6	80	120	11/03/2022
Lithium	*	0.0030		<b>0.468</b>	0.5000	0	93.6	80	120	11/03/2022
Manganese		0.0020	B	<b>0.488</b>	0.5000	0	97.6	80	120	11/04/2022
Molybdenum		0.0015	B	<b>0.485</b>	0.5000	0	97.1	80	120	11/04/2022
Selenium		0.0010		<b>0.485</b>	0.5000	0	97.1	80	120	11/03/2022
Thallium		0.0020		<b>0.234</b>	0.2500	0	93.4	80	120	11/03/2022

Batch 199618      SampType: MS      Units mg/L  
 SampID: 22101833-013DMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		<b>0.500</b>	0.5000	0	100.0	75	125	11/03/2022
Arsenic		0.0010		<b>0.527</b>	0.5000	0.002485	105.0	75	125	11/03/2022
Barium		0.0010		<b>2.40</b>	2.000	0.2736	106.1	75	125	11/03/2022
Beryllium		0.0010		<b>0.0496</b>	0.0500	0	99.2	75	125	11/03/2022
Boron		0.0250		<b>2.74</b>	0.5000	2.285	91.8	75	125	11/04/2022
Cadmium		0.0010		<b>0.0472</b>	0.0500	0	94.4	75	125	11/03/2022
Chromium		0.0015	B	<b>0.175</b>	0.2000	0	87.3	75	125	11/04/2022
Cobalt		0.0010		<b>0.451</b>	0.5000	0	90.2	75	125	11/04/2022
Iron		0.0250	BS	<b>12.4</b>	2.000	9.690	136.5	75	125	11/04/2022
Lead		0.0010		<b>0.512</b>	0.5000	0	102.3	75	125	11/03/2022
Lithium	*	0.0030		<b>0.524</b>	0.5000	0.01179	102.4	75	125	11/03/2022
Manganese		0.0020	B	<b>1.74</b>	0.5000	1.263	95.0	75	125	11/04/2022
Molybdenum		0.0015	B	<b>0.537</b>	0.5000	0.07177	93.0	75	125	11/04/2022
Selenium		0.0010		<b>0.516</b>	0.5000	0.004157	102.4	75	125	11/03/2022
Thallium		0.0020		<b>0.257</b>	0.2500	0	102.9	75	125	11/03/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22101833

Client Project: Vistra Baldwin

Report Date: 16-Dec-22

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

Batch 199618		SampType: MSD		Units mg/L				RPD Limit: 20			
SampID: 22101833-013DMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Antimony		0.0010		<b>0.528</b>	0.5000	0	105.6	0.5001	5.39	11/03/2022	
Arsenic		0.0010		<b>0.566</b>	0.5000	0.002485	112.7	0.5273	7.03	11/03/2022	
Barium		0.0010		<b>2.59</b>	2.000	0.2736	115.6	2.396	7.60	11/03/2022	
Beryllium		0.0010		<b>0.0536</b>	0.0500	0	107.2	0.04960	7.76	11/03/2022	
Boron		0.0250		<b>2.78</b>	0.5000	2.285	98.5	2.745	1.21	11/04/2022	
Cadmium		0.0010		<b>0.0511</b>	0.0500	0	102.3	0.04719	8.03	11/03/2022	
Chromium		0.0015	B	<b>0.172</b>	0.2000	0	86.2	0.1745	1.23	11/04/2022	
Cobalt		0.0010		<b>0.435</b>	0.5000	0	87.0	0.4508	3.52	11/04/2022	
Iron		0.0250	B	<b>11.5</b>	2.000	9.690	92.8	12.42	7.28	11/04/2022	
Lead		0.0010		<b>0.530</b>	0.5000	0	106.1	0.5115	3.62	11/03/2022	
Lithium	*	0.0030		<b>0.556</b>	0.5000	0.01179	108.8	0.5237	5.97	11/03/2022	
Manganese		0.0020	B	<b>1.72</b>	0.5000	1.263	92.4	1.738	0.74	11/04/2022	
Molybdenum		0.0015	B	<b>0.546</b>	0.5000	0.07177	94.9	0.5370	1.68	11/04/2022	
Selenium		0.0010		<b>0.552</b>	0.5000	0.004157	109.5	0.5160	6.73	11/03/2022	
Thallium		0.0020		<b>0.275</b>	0.2500	0	110.0	0.2573	6.66	11/03/2022	

### Batch 199809 SampType: MBLK Units mg/L

SampID: MBLK-199809											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Iron		0.0250		<b>&lt; 0.0250</b>	0.0115	0	0	-100	100	11/10/2022	
Manganese		0.0020		<b>&lt; 0.0020</b>	0.0008	0	0	-100	100	11/10/2022	
Molybdenum		0.0015		<b>&lt; 0.0015</b>	0.0006	0	0	-100	100	11/10/2022	

### Batch 199809 SampType: LCS Units mg/L

SampID: LCS-199809											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Iron		0.0250		<b>1.89</b>	2.000	0	94.7	80	120	11/10/2022	
Manganese		0.0020		<b>0.438</b>	0.5000	0	87.5	80	120	11/10/2022	
Molybdenum		0.0015		<b>0.411</b>	0.5000	0	82.2	80	120	11/10/2022	

### SW-846 7470A (TOTAL)

Batch 199620		SampType: MBLK		Units mg/L							
SampID: MBLK-199620											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>&lt; 0.00020</b>	0.0001	0	0	-100	100	11/03/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22101833

Client Project: Vistra Baldwin

Report Date: 16-Dec-22

### SW-846 7470A (TOTAL)

Batch 199620		SampType: LCS		Units mg/L							
SampID: LCS-199620											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00521</b>	0.0050	0	104.1	85	115	11/03/2022	

Batch 199620		SampType: MS		Units mg/L							
SampID: 22101833-005DMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00525</b>	0.0050	0.00008520	103.4	75	125	11/03/2022	

Batch 199620		SampType: MSD		Units mg/L						RPD Limit: 15		Date Analyzed
SampID: 22101833-005DMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Mercury		0.00020		<b>0.00489</b>	0.0050	0.00008520	96.2	0.005254	7.08	11/03/2022		

Batch 199654		SampType: MBLK		Units mg/L							
SampID: MBLK-199654											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>&lt; 0.00020</b>	0.0001	0	0	-100	100	11/04/2022	

Batch 199654		SampType: LCS		Units mg/L							
SampID: LCS-199654											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00536</b>	0.0050	0	107.2	85	115	11/04/2022	

Batch 199654		SampType: MS		Units mg/L							
SampID: 22101833-013DMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00478</b>	0.0050	0.00006340	94.3	75	125	11/04/2022	

Batch 199654		SampType: MSD		Units mg/L						RPD Limit: 15		Date Analyzed
SampID: 22101833-013DMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Mercury		0.00020		<b>0.00465</b>	0.0050	0.00006340	91.7	0.004778	2.74	11/04/2022		



# Receiving Check List

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

Client: Ramboll

Work Order: 22101833

Client Project: Vistra Baldwin

Report Date: 16-Dec-22

Carrier: Tim Mathis

Received By: CET

Completed by:

Reviewed by:

On:

28-Oct-22

Timothy W. Mathis

On:

28-Oct-22

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

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

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

- |   |                              |  |   |
|---|------------------------------|--|---|
| Water – at least one vial per sample has zero headspace?  | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | No VOA vials <input checked="" type="checkbox"/>      |
| Water - TOX containers have zero headspace?               | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | No TOX containers <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt?                       | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | NA <input type="checkbox"/>                           |
| NPDES/CWA TCN interferences checked/treated in the field? | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | NA <input checked="" type="checkbox"/>                |

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

pH strip #83856. - TMathis - 10/28/2022 10:07:18 AM

XPW06, EB-02, and EB-03 were received on 10/28/22 at 1347 (on ice 5.6C - LTG3) and added to this chain of custody rather than a new WO#. - ehurley - 10/31/2022 8:14:00 AM

Additional Nitric Acid (83726) was needed in XPW06 upon arrival at the laboratory. - ANC/pyoch - 10/28/2022 5:15:03 PM

# CHAIN OF CUSTODY

pg. 1 of 2 Work order # 22101833

**TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005**

**Client:** Ramboil  
**Address:** 300 S. Wacker Drive  
**City / State / Zip** Chicago, IL 60606  
**Contact:** Evvan Plank **Phone:** (414) 837-3687  
**E-Mail:** Evvan.Plank@ramboil.com **Fax:** \_\_\_\_\_

**Samples on:**  ICE  BLUE ICE  NO ICE 2.4 °C LTG# 1  
**Preserved in:**  LAB  FIELD **FOR LAB USE ONLY**  
**Lab Notes:** 8385072  
\* WILL RECEIVE 10-28-22 RETURNING ON SEPARATE WDO

Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No  
 Are these samples known to be hazardous?  Yes  No  
 Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section.  Yes  No

**Client Comments:**  
 Part 845 metals: antimony, arsenic, barium, beryllium, boron, cadmium, chromium, cobalt, lead, lithium, mercury, molybdenum, selenium, and thallium (6020, 7470A)  
\* EB-02, EB-03 and XPWD06 received on 10/28/22 @ 1347 (on ice 5.6°C LTG3) - 10/31/22  
COURIER

<b>Project Name/Number</b> <u>Vistra Baldwin</u>	<b>Sample Collector's Name</b> <u>ANDREW HARROWILL SAMMY MALLOW</u>
<b>Results Requested</b> <input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other _____ <input type="checkbox"/> 3 Day (50% Surcharge)	<b>Billing Instructions</b> # and Type of Containers

MATRIX		INDICATE ANALYSIS REQUESTED															
Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	ALK B / ALK C	Ca K Mg Na	Chloride Sulfate	Fe / Mn	Fluoride TDS	Part 845 Metals	Ra226/228 (SUB)	Strontium				
					X	X	X	X	X	X	X	X					
					X	X	X	X	X	X	X	X					
					X	X	X	X	X	X	X	X	X				
	X																
	X										X						
					X	X	X	X	X	X	X	X	X				
					X	X	X	X	X	X	X	X	X				
					X	X	X	X	X	X	X	X	X				

Lab Use Only	Sample Identification	Date/Time Sampled	UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER
<u>22101833-001</u>	<u>XPWD01</u>	<u>10/26/22 1514</u>	<u>2</u>	<u>3</u>						
<u>002</u>	<u>DUP-01</u>	<u>10/26/22 1525</u>	<u>2</u>	<u>3</u>						
<u>003</u>	<u>MW-306</u>	<u>10/26/22 1705</u>	<u>2</u>	<u>3</u>						
<u>* 013</u>	<u>XPW06 *</u>	<u>10/26/22 1726</u>	<u>6</u>	<u>29</u>						
<u>* 011</u>	<u>EB-02 *</u>	<u>10/26/22 1845</u>	<u>1</u>							X
<u>* 012</u>	<u>EB-03 *</u>	<u>10/26/22 1850</u>	<u>1</u>							X
<u>004</u>	<u>MW-370</u>	<u>10/27/22 0850</u>	<u>2</u>	<u>3</u>						X
<u>005</u>	<u>MW-356</u>	<u>10/27/22 1000</u>	<u>2</u>	<u>3</u>						X
<u>006</u>	<u>MW-192</u>	<u>10/27/22 1002</u>	<u>2</u>	<u>3</u>						X
<u>007</u>	<u>MW-193</u>	<u>10/27/22 11:23</u>	<u>2</u>	<u>3</u>						X

Relinquished By	Date/Time
<u>SAMMY MALLOW</u>	<u>10/27/22 1500</u>
<u>J. CoP</u>	<u>10-27-22 1547</u>
<u>[Signature]</u>	<u>10/28/22 0720</u>

Received By	Date/Time
<u>[Signature]</u>	<u>10-27-22 1500</u>
<u>[Signature]</u>	<u>10-27-22 1547</u>
<u>[Signature]</u>	<u>10-28-22 0720</u>

# CHAIN OF CUSTODY

**TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005**

**Client:** Ramboll  
**Address:** 300 S. Wacker Drive  
**City / State / Zip:** Chicago, IL 60606  
**Contact:** Ewan Plank **Phone:** (414) 837-3687  
**E-Mail:** Ewan.Plank@ramboll.com **Fax:** \_\_\_\_\_

**Samples on:**  ICE  BLUE ICE  NO ICE °C        LTG#         
**Preserved in:**  LAB  FIELD **FOR LAB USE ONLY**  
**Lab Notes**

Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No  
 Are these samples known to be hazardous?  Yes  No  
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section.  Yes  No

**Client Comments:**  
 Part 845 metals: antimony, arsenic, barium, beryllium, boron, cadmium, chromium, cobalt, lead, lithium, mercury, molybdenum, selenium, and thallium (6020, 7470A)

Project Name/Number Vistra Baldwin			Sample Collector's Name <i>ANDREW HARRISON SAMMY MALLOW</i>								MATRIX		INDICATE ANALYSIS REQUESTED														
Results Requested <input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)		Billing Instructions		# and Type of Containers								Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	ALK B / ALK C	Ca K Mg Na	Chloride Sulfate	Fe / Mn	Fluoride TDS	Part 845 Metals	Ra226/228 (SUB)	Strontium		
Lab Use Only	Sample Identification	Date/Time Sampled	UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER																	
22101833-008	MW-194	10/27/22 13:47	2	3											X	X	X	X	X	X	X	X	X	X	X		
009	MW-392	10/27/22 12:35	2	3											X	X	X	X	X	X	X	X	X	X	X		
010	MW-393	10/27/22 14:25	2	3											X	X	X	X	X	X	X	X	X	X	X		
<i>ALL 10/27/22</i>																											

Relinquished By		Date/Time		Received By		Date/Time	
<i>SAMMY MALLOW / J. COLE (RAMBOLL)</i>		10/27/22 1500		<i>J. COLE</i>		10-27-22 1500	
<i>J. COLE</i>		10-27-22 1547		<i>J. COLE</i>		10/27/22 1547	
<i>J. COLE</i>		10-28-22 0720					





# ANALYTICAL REPORT

December 16, 2022

Revised Report

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

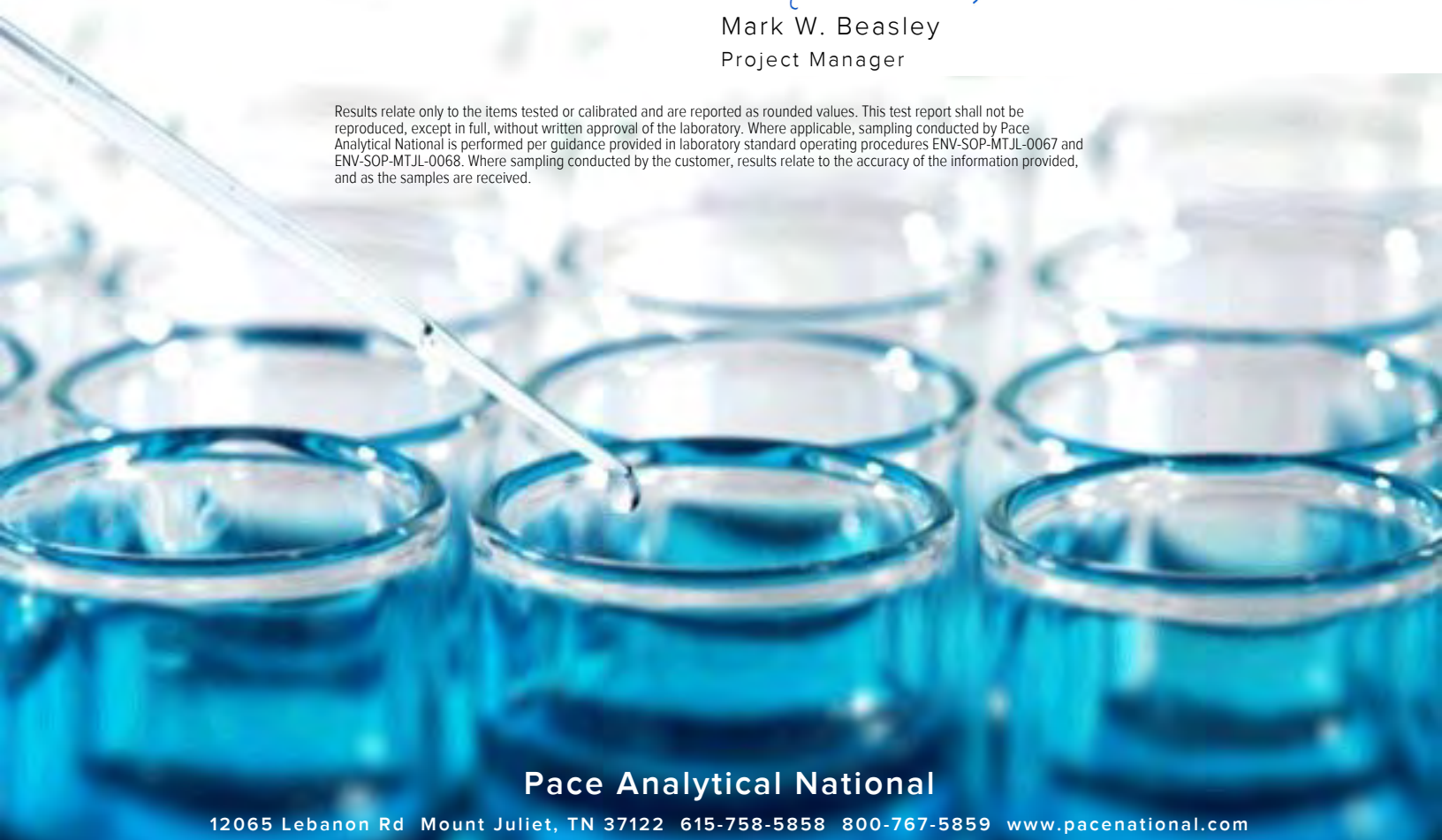
## TEKLAB, Inc.

Sample Delivery Group: L1552399  
 Samples Received: 11/01/2022  
 Project Number: 22101833  
 Description:  
 Site: 001  
 Report To: Elizabeth Hurley  
 5445 Horseshoe Lake Road  
 Collinsville, IL 62234

Entire Report Reviewed By:

Mark W. Beasley  
Project Manager

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



**Pace Analytical National**

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

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# SAMPLE SUMMARY

## 22101833-001 L1552399-01 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/26/22 15:14  
11/01/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1954645	1	11/08/22 10:12	11/28/22 11:05	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1952856	1	11/11/22 10:26	11/28/22 11:05	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1952856	1	11/11/22 10:26	11/19/22 13:59	RRE	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## 22101833-002 L1552399-02 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/26/22 15:25  
11/01/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1954645	1	11/08/22 10:12	11/28/22 11:05	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1952856	1	11/11/22 10:26	11/28/22 11:05	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1952856	1	11/11/22 10:26	11/19/22 13:57	RRE	Mt. Juliet, TN

## 22101833-003 L1552399-03 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/26/22 17:05  
11/01/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1954645	1	11/08/22 10:12	11/28/22 11:05	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1952856	1	11/11/22 10:26	11/28/22 11:05	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1952856	1	11/11/22 10:26	11/19/22 13:57	RRE	Mt. Juliet, TN

## 22101833-004 L1552399-04 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/27/22 08:50  
11/01/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1954645	1	11/08/22 10:12	11/28/22 11:05	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1952856	1	11/11/22 10:26	11/28/22 11:05	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1952856	1	11/11/22 10:26	11/19/22 13:57	RRE	Mt. Juliet, TN

## 22101833-005 L1552399-05 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/27/22 10:00  
11/01/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1954645	1	11/08/22 10:12	11/28/22 11:05	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1952856	1	11/11/22 10:26	11/28/22 11:05	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1952856	1	11/11/22 10:26	11/19/22 13:57	RRE	Mt. Juliet, TN

## 22101833-006 L1552399-06 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/27/22 10:02  
11/01/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1954645	1	11/08/22 10:12	11/28/22 11:05	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1952856	1	11/11/22 10:26	11/28/22 11:05	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1952856	1	11/11/22 10:26	11/19/22 13:57	RRE	Mt. Juliet, TN

# SAMPLE SUMMARY

## 22101833-007 L1552399-07 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/27/22 11:23  
11/01/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1954645	1	11/08/22 10:12	11/28/22 11:05	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1952856	1	11/11/22 10:26	11/28/22 11:05	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1952856	1	11/11/22 10:26	11/19/22 13:57	RRE	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## 22101833-008 L1552399-08 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/27/22 13:47  
11/01/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1954645	1	11/08/22 10:12	11/28/22 11:05	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1952856	1	11/11/22 10:26	11/28/22 11:05	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1952856	1	11/11/22 10:26	11/19/22 13:57	RRE	Mt. Juliet, TN

## 22101833-009 L1552399-09 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/27/22 12:35  
11/01/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1954645	1	11/08/22 10:12	11/28/22 11:05	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1952856	1	11/11/22 10:26	11/28/22 11:05	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1952856	1	11/11/22 10:26	11/19/22 13:57	RRE	Mt. Juliet, TN

## 22101833-010 L1552399-10 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/27/22 14:25  
11/01/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1954645	1	11/08/22 10:12	11/28/22 11:05	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1952856	1	11/11/22 10:26	11/28/22 11:05	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1952856	1	11/11/22 10:26	11/19/22 13:57	RRE	Mt. Juliet, TN

## 22101833-013 L1552399-11 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/26/22 17:26  
11/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1955734	1	11/08/22 16:06	11/29/22 09:36	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1955515	1	11/11/22 10:29	11/29/22 09:36	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1955515	1	11/11/22 10:29	11/15/22 13:16	RGT	Mt. Juliet, TN

# CASE NARRATIVE

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



Mark W. Beasley  
Project Manager

## Report Revision History

---

Level II Report - Version 1: 12/02/22 15:57

## Project Narrative

---

Updated sample date/time

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.511		0.261	0.467	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Barium	87.4			30.0-143	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Yttrium	99.2			30.0-136	11/28/2022 11:05	<a href="#">WG1954645</a>

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.905		0.344	0.495	11/28/2022 11:05	<a href="#">WG1952856</a>

<sup>4</sup>Cn

<sup>5</sup>Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.394		0.224	0.165	11/19/2022 13:59	<a href="#">WG1952856</a>
(T) Barium-133	93.1			30.0-143	11/19/2022 13:59	<a href="#">WG1952856</a>

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.239	J	0.255	0.466	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Barium	82.6			30.0-143	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Yttrium	101			30.0-136	11/28/2022 11:05	<a href="#">WG1954645</a>

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.354	J	0.314	0.544	11/28/2022 11:05	<a href="#">WG1952856</a>

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.114	J	0.183	0.280	11/19/2022 13:57	<a href="#">WG1952856</a>
(T) Barium-133	91.4			30.0-143	11/19/2022 13:57	<a href="#">WG1952856</a>

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.130	<u>U</u>	0.233	0.429	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Barium	96.0			30.0-143	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Yttrium	106			30.0-136	11/28/2022 11:05	<a href="#">WG1954645</a>

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.262	<u>J</u>	0.296	0.506	11/28/2022 11:05	<a href="#">WG1952856</a>

<sup>4</sup>Cn

<sup>5</sup>Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.133	<u>J</u>	0.183	0.268	11/19/2022 13:57	<a href="#">WG1952856</a>
(T) Barium-133	85.1			30.0-143	11/19/2022 13:57	<a href="#">WG1952856</a>

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.669		0.248	0.438	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Barium	95.2			30.0-143	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Yttrium	103			30.0-136	11/28/2022 11:05	<a href="#">WG1954645</a>

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.16		0.395	0.535	11/28/2022 11:05	<a href="#">WG1952856</a>

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.495		0.308	0.308	11/19/2022 13:57	<a href="#">WG1952856</a>
(T) Barium-133	91.4			30.0-143	11/19/2022 13:57	<a href="#">WG1952856</a>

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.234	<u>U</u>	0.278	0.526	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Barium	103			30.0-143	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Yttrium	89.5			30.0-136	11/28/2022 11:05	<a href="#">WG1954645</a>

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.000	<u>U</u>	0.329	0.630	11/28/2022 11:05	<a href="#">WG1952856</a>

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	-0.0339	<u>U</u>	0.176	0.346	11/19/2022 13:57	<a href="#">WG1952856</a>
(T) Barium-133	94.1			30.0-143	11/19/2022 13:57	<a href="#">WG1952856</a>

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.0570	<u>U</u>	0.282	0.525	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Barium	93.4			30.0-143	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Yttrium	102			30.0-136	11/28/2022 11:05	<a href="#">WG1954645</a>

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

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.255	<u>J</u>	0.370	0.607	11/28/2022 11:05	<a href="#">WG1952856</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.255	<u>J</u>	0.240	0.304	11/19/2022 13:57	<a href="#">WG1952856</a>
(T) Barium-133	93.5			30.0-143	11/19/2022 13:57	<a href="#">WG1952856</a>

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.502	<u>U</u>	0.281	0.537	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Barium	84.7			30.0-143	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Yttrium	104			30.0-136	11/28/2022 11:05	<a href="#">WG1954645</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.186	<u>U</u>	0.363	0.627	11/28/2022 11:05	<a href="#">WG1952856</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.186	<u>J</u>	0.230	0.323	11/19/2022 13:57	<a href="#">WG1952856</a>
(T) Barium-133	95.0			30.0-143	11/19/2022 13:57	<a href="#">WG1952856</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.410	J	0.253	0.456	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Barium	84.0			30.0-143	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Yttrium	104			30.0-136	11/28/2022 11:05	<a href="#">WG1954645</a>

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

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.822		0.447	0.649	11/28/2022 11:05	<a href="#">WG1952856</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.412	J	0.368	0.462	11/19/2022 13:57	<a href="#">WG1952856</a>
(T) Barium-133	67.8			30.0-143	11/19/2022 13:57	<a href="#">WG1952856</a>

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.290	J	0.237	0.431	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Barium	94.6			30.0-143	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Yttrium	109			30.0-136	11/28/2022 11:05	<a href="#">WG1954645</a>

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

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.700		0.376	0.534	11/28/2022 11:05	<a href="#">WG1952856</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.410		0.292	0.315	11/19/2022 13:57	<a href="#">WG1952856</a>
(T) Barium-133	82.5			30.0-143	11/19/2022 13:57	<a href="#">WG1952856</a>

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.163	<u>U</u>	0.246	0.452	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Barium	93.9			30.0-143	11/28/2022 11:05	<a href="#">WG1954645</a>
(T) Yttrium	104			30.0-136	11/28/2022 11:05	<a href="#">WG1954645</a>

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.377	<u>J</u>	0.325	0.527	11/28/2022 11:05	<a href="#">WG1952856</a>

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.214	<u>J</u>	0.212	0.270	11/19/2022 13:57	<a href="#">WG1952856</a>
(T) Barium-133	87.9			30.0-143	11/19/2022 13:57	<a href="#">WG1952856</a>

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.05		0.242	0.429	11/29/2022 09:36	<a href="#">WG1955734</a>
(T) Barium	86.6			30.0-143	11/29/2022 09:36	<a href="#">WG1955734</a>
(T) Yttrium	88.4			30.0-136	11/29/2022 09:36	<a href="#">WG1955734</a>

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.69		0.402	0.518	11/29/2022 09:36	<a href="#">WG1955515</a>

<sup>4</sup>Cn

<sup>5</sup>Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.641		0.321	0.291	11/15/2022 13:16	<a href="#">WG1955515</a>
(T) Barium-133	97.5			30.0-143	11/15/2022 13:16	<a href="#">WG1955515</a>

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



Method Blank (MB)

(MB) R3866180-1 11/28/22 11:05

Analyte	MB Result	MB Qualifier	MB Uncertainty	MB MDA
	pCi/l		+ / -	pCi/l
Radium-228	0.0761	<u>U</u>	0.143	0.265
(T) Barium	102		102	
(T) Yttrium	106		106	

L1547148-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1547148-11 11/28/22 11:05 • (DUP) R3866180-5 11/28/22 11:05

Analyte	Original Result	Original Uncertainty	Original MDA	DUP Result	DUP Uncertainty	DUP MDA	Dilution	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	+ / -	pCi/l		%			%	
Radium-228	0.252	0.212	0.389	0.652	0.273	0.389	1	88.5	1.16		20	3
(T) Barium	86.2			102	102							
(T) Yttrium	98.1			107	107							

Laboratory Control Sample (LCS)

(LCS) R3866180-2 11/28/22 11:05

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-228	5.00	5.56	111	80.0-120	
(T) Barium			77.2		
(T) Yttrium			106		

L1547970-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1547970-01 11/28/22 11:05 • (MS) R3866180-3 11/28/22 11:05 • (MSD) R3866180-4 11/28/22 11:05

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-228	10.0	-0.144	9.63	9.91	96.3	99.1	1	70.0-130			2.93		20
(T) Barium		85.5			91.3	81.0							
(T) Yttrium		102			100	107							

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3866748-1 11/29/22 09:36

Analyte	MB Result	MB Qualifier	MB Uncertainty	MB MDA
	pCi/l		+ / -	pCi/l
Radium-228	-0.146	<u>U</u>	0.162	0.319
(T) Barium	87.1		87.1	
(T) Yttrium	102		102	

L1549369-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1549369-01 11/29/22 09:36 • (DUP) R3866748-5 11/29/22 09:36

Analyte	Original Result	Original Uncertainty	Original MDA	DUP Result	DUP Uncertainty	DUP MDA	Dilution	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	+ / -	pCi/l		%			%	
Radium-228	0.835	0.211	0.378	0.159	0.300	0.378	1	136	1.84	<u>U</u>	20	3
(T) Barium	90.1			94.6	94.6							
(T) Yttrium	108			112	112							

Laboratory Control Sample (LCS)

(LCS) R3866748-2 11/29/22 09:36

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-228	5.00	5.96	119	80.0-120	
(T) Barium			92.1		
(T) Yttrium			90.0		

L1552399-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1552399-11 11/29/22 09:36 • (MS) R3866748-3 11/29/22 09:36 • (MSD) R3866748-4 11/29/22 09:36

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-228	10.0	1.05	9.90	10.2	88.5	91.2	1	70.0-130			2.73		20
(T) Barium		86.6			87.9	93.2							
(T) Yttrium		88.4			108	102							

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3867569-1 11/18/22 19:32

Analyte	MB Result	MB Qualifier	MB Uncertainty	MB MDA
	pCi/l		+ / -	pCi/l
Radium-226	-0.0141	<u>U</u>	0.0218	0.0664
(T) Barium-133	87.1		87.1	

L1552399-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1552399-01 11/19/22 13:59 • (DUP) R3867569-5 11/18/22 19:32

Analyte	Original Result	Original Uncertainty	Original MDA	DUP Result	DUP Uncertainty	DUP MDA	Dilution	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	+ / -	pCi/l		%			%	
Radium-226	0.394	0.224	0.165	0.203	0.210	0.165	1	64.0	0.621	<u>J</u>	20	3
(T) Barium-133	93.1			88.0	88.0							

Laboratory Control Sample (LCS)

(LCS) R3867569-2 11/18/22 19:32

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-226	5.02	5.24	104	80.0-120	
(T) Barium-133			89.2		

L1552399-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1552399-10 11/19/22 13:57 • (MS) R3867569-3 11/18/22 19:32 • (MSD) R3867569-4 11/18/22 19:32

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-226	20.0	0.214	18.5	20.8	91.5	103	1	75.0-125			11.6		20
(T) Barium-133		87.9			96.5	94.2							

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3862431-1 11/15/22 12:48

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-226	0.0180	<u>U</u>	0.0313	0.0510
(T) Barium-133	93.4		93.4	

Laboratory Control Sample (LCS)

(LCS) R3862431-2 11/15/22 12:48

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.02	5.07	101	80.0-120	
(T) Barium-133			87.7		

L1552399-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1552399-11 11/15/22 13:16 • (MS) R3862431-3 11/15/22 12:48 • (MSD) R3862431-5 11/15/22 13:16

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.641	18.9	21.7	91.4	105	1	75.0-125			13.6		20
(T) Barium-133		97.5			90.0	89.1							

L1553296-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1553296-06 11/16/22 12:53 • (MS) R3862431-4 11/15/22 12:48 • (MSD) R3862431-6 11/15/22 13:16

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.0433	22.5	22.2	112	111	1	75.0-125			1.57		20
(T) Barium-133		88.9			90.6	90.1							

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

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

### Abbreviations and Definitions

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

### Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

# ACCREDITATIONS & LOCATIONS

## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

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

**TEKLAB, INC. Chain of Custody**

Collinsville, IL 62234 Phone (618) 344-1004 Fax (618) 344-1005

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

**Teklab Inc**  
 5445 Horseshoe Lake Road  
 Collinsville, IL 62234

Cooler Temp:  Sampler:  QC Level:

Comments: **Please issue reports and invoices via email only**  
 Please analyze for Radium 22/228 per methods specified for Vistra/Ramboll projects.  
 Collected at an IL site.  
 Batch QC is required for all analyses requested. EDD requested

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

Phone:

**B071**

*1552399*

**PLEASE NOTE:**

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

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix	Ra226/228														
-01	22101833-001	10/26/22 1514	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-02	22101833-002	10/26/22 1525	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-03	22101833-003	10/26/22 1705	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-04	22101833-004	12/27/22 10/26/22 0850	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-05	22101833-005	10/27/22 1000	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-06	22101833-006	10/27/22 1002	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-07	22101833-007	10/27/22 1123	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-08	22101833-008	10/27/22 1347	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-09	22101833-009	10/27/22 1235	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-10	22101833-010	10/27/22 1425	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Relinquished By	Date/Time	Received By	Date/Time
<i>[Signature]</i>		<i>Jack Morrison</i>	11-7-22 0900

11/3-NCF-L1552399 TEKLABIL

R5

Time estimate: 0h

Time spent: 0h

Members

- HM Hailey Melson (responsible)
- MB Mark Beasley

Due on 7 November 2022 8:00 AM for target Done

- Login Clarification needed
- Chain of custody is incomplete
- Please specify Metals requested
- Please specify TCLP requested
- Received additional samples not listed on COC
- Sample IDs on containers do not match IDs on COC
- Client did not "X" analysis
- Chain of Custody is missing
- If no COC: Received by: \_\_\_\_\_
- If no COC: Date/Time: \_\_\_\_\_
- If no COC: Temp./Cont.Rec./pH: \_\_\_\_\_
- If no COC: Carrier: \_\_\_\_\_
- If no COC: Tracking #: \_\_\_\_\_
- Client informed by call
- Client informed by Email
- Client informed by Voicemail
- Date/Time: 11/3/22 \_\_\_\_\_
- PM initials: MB \_\_\_\_\_
- Client Contact: Elizabeth Hurley \_\_\_\_\_

Comments

- Hailey Melson 3 November 2022 8:51 AM

Received ID: 22101833-013C not listed on the COC. 6 containers total.
- Mark Beasley 3 November 2022 1:33 PM

Add to COC and run
- Hailey Melson 3 November 2022 5:37 PM

Done



December 09, 2022

Evvan Plank  
Ramboll  
300 S. Wacker Drive  
Suite 130  
Chicago, IL 60606  
TEL: (414) 837-3687  
FAX: (414) 837-3608



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

**RE:** Vistra Baldwin

**WorkOrder:** 22101892

Dear Evvan Plank:

TEKLAB, INC received 11 samples on 10/28/2022 2:49:00 PM for the analysis presented in the following report.

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

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

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

Sincerely,



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



## Report Contents

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

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**Client:** Ramboll

**Work Order:** 22101892

**Client Project:** Vistra Baldwin

**Report Date:** 09-Dec-22

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**This reporting package includes the following:**

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Sample Summary	18
Dates Report	19
Quality Control Results	23
Receiving Check List	30
Chain of Custody	Appended

**Client:** Ramboll

**Work Order:** 22101892

**Client Project:** Vistra Baldwin

**Report Date:** 09-Dec-22

### 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)

**Client:** Ramboll

**Work Order:** 22101892

**Client Project:** Vistra Baldwin

**Report Date:** 09-Dec-22

### Qualifiers

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

**Client:** Ramboll

**Work Order:** 22101892

**Client Project:** Vistra Baldwin

**Report Date:** 09-Dec-22

**Cooler Receipt Temp:** 5.6 °C

Radium-226 and Radium-228 analysis was performed by Pace Analytical National. See attached report for results.

### Locations

#### Collinsville

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

#### Collinsville Air

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

#### Springfield

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

#### Chicago

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

#### Kansas City

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



## Accreditations

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

**Client:** Ramboll

**Work Order:** 22101892

**Client Project:** Vistra Baldwin

**Report Date:** 09-Dec-22

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



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101892-001  
 Matrix: GROUNDWATER

Work Order: 22101892  
 Report Date: 09-Dec-22  
 Client Sample ID: MW-394  
 Collection Date: 10/27/2022 16:20

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		599	mg/L	1	11/01/2022 13:50	R320406
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/01/2022 13:50	R320406
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		2240	mg/L	1	11/02/2022 12:40	R320569
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		348	mg/L	10	11/03/2022 16:31	R320580
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		4.42	mg/L	1	11/02/2022 14:33	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	80		656	mg/L	20	11/07/2022 10:51	R320722
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		11.6	mg/L	1	11/04/2022 11:16	199650
Magnesium	NELAP	0.0500		5.63	mg/L	1	11/04/2022 11:16	199650
Potassium	NELAP	0.100		3.36	mg/L	1	11/04/2022 11:16	199650
Sodium	NELAP	0.0500		858	mg/L	1	11/04/2022 11:16	199650
Strontium	NELAP	0.0100		0.473	mg/L	1	11/04/2022 11:16	199650
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0021	mg/L	5	11/04/2022 19:11	199650
Arsenic	NELAP	0.0010		0.0015	mg/L	5	11/04/2022 19:11	199650
Barium	NELAP	0.0010		0.0243	mg/L	5	11/04/2022 19:11	199650
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 19:11	199650
Boron	NELAP	0.0250		2.23	mg/L	5	11/04/2022 19:11	199650
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 19:11	199650
Chromium	NELAP	0.0015	J	0.0007	mg/L	5	11/04/2022 19:11	199650
Cobalt	NELAP	0.0010	J	0.0005	mg/L	5	11/04/2022 19:11	199650
Iron	NELAP	0.0250		0.372	mg/L	5	11/04/2022 19:11	199650
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 19:11	199650
Lithium	*	0.0030		0.109	mg/L	5	11/04/2022 19:11	199650
Manganese	NELAP	0.0020		0.0199	mg/L	5	11/04/2022 19:11	199650
Molybdenum	NELAP	0.0015		0.0088	mg/L	5	11/04/2022 19:11	199650
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 19:11	199650
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/04/2022 19:11	199650
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	0.00008	mg/L	1	11/04/2022 13:18	199654
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/15/2022 0:00	R322144



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101892-002  
 Matrix: GROUNDWATER

Work Order: 22101892  
 Report Date: 09-Dec-22  
 Client Sample ID: MW-158R  
 Collection Date: 10/27/2022 15:52

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		257	mg/L	1	11/01/2022 14:06	R320406
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/01/2022 14:06	R320406
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		496	mg/L	1	11/02/2022 12:57	R320569
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	20		75	mg/L	2	11/07/2022 11:02	R320718
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.42	mg/L	1	11/02/2022 14:35	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	40		80	mg/L	10	11/03/2022 16:38	R320588
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		75.7	mg/L	1	11/04/2022 11:18	199650
Magnesium	NELAP	0.0500		29.2	mg/L	1	11/04/2022 11:18	199650
Potassium	NELAP	0.100		1.21	mg/L	1	11/04/2022 11:18	199650
Sodium	NELAP	0.0500		52.4	mg/L	1	11/04/2022 11:18	199650
Strontium	NELAP	0.0100		0.278	mg/L	1	11/04/2022 11:18	199650
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	J	0.0005	mg/L	5	11/04/2022 19:17	199650
Arsenic	NELAP	0.0010		0.0010	mg/L	5	11/04/2022 19:17	199650
Barium	NELAP	0.0010		0.131	mg/L	5	11/04/2022 19:17	199650
Beryllium	NELAP	0.0010	J	0.0005	mg/L	5	11/04/2022 19:17	199650
Boron	NELAP	0.0250		0.0610	mg/L	5	11/04/2022 19:17	199650
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 19:17	199650
Chromium	NELAP	0.0015	J	0.0008	mg/L	5	11/04/2022 19:17	199650
Cobalt	NELAP	0.0010	J	0.0008	mg/L	5	11/04/2022 19:17	199650
Iron	NELAP	0.0250		0.163	mg/L	5	11/04/2022 19:17	199650
Lead	NELAP	0.0010		0.0033	mg/L	5	11/04/2022 19:17	199650
Lithium	*	0.0030		0.0158	mg/L	5	11/04/2022 19:17	199650
Manganese	NELAP	0.0020		0.597	mg/L	5	11/04/2022 19:17	199650
Molybdenum	NELAP	0.0015		0.0094	mg/L	5	11/04/2022 19:17	199650
Selenium	NELAP	0.0010	J	0.0008	mg/L	5	11/04/2022 19:17	199650
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/04/2022 19:17	199650
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	0.00011	mg/L	1	11/04/2022 13:21	199654
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/15/2022 0:00	R322144





## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101892-003  
 Matrix: GROUNDWATER

Work Order: 22101892  
 Report Date: 09-Dec-22  
 Client Sample ID: MW-258  
 Collection Date: 10/27/2022 18:02

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		610	mg/L	1	11/01/2022 14:13	R320406
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		48	mg/L	1	11/01/2022 14:13	R320406
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		920	mg/L	2.5	11/02/2022 12:58	R320569
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		16	mg/L	1	11/03/2022 16:40	R320580
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		2.51	mg/L	1	11/02/2022 14:37	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	40		55	mg/L	10	11/03/2022 16:46	R320588
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		4.94	mg/L	1	11/04/2022 11:20	199650
Magnesium	NELAP	0.0500		2.54	mg/L	1	11/04/2022 11:20	199650
Potassium	NELAP	0.100		3.01	mg/L	1	11/04/2022 11:20	199650
Sodium	NELAP	0.0500		329	mg/L	1	11/04/2022 11:20	199650
Strontium	NELAP	0.0100		0.110	mg/L	1	11/04/2022 11:20	199650
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0016	mg/L	5	11/04/2022 19:23	199650
Arsenic	NELAP	0.0010		0.0015	mg/L	5	11/04/2022 19:23	199650
Barium	NELAP	0.0010		0.0562	mg/L	5	11/04/2022 19:23	199650
Beryllium	NELAP	0.0010	J	0.0004	mg/L	5	11/04/2022 19:23	199650
Boron	NELAP	0.0250		1.27	mg/L	5	11/04/2022 19:23	199650
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 19:23	199650
Chromium	NELAP	0.0015		0.0108	mg/L	5	11/04/2022 19:23	199650
Cobalt	NELAP	0.0010		0.0012	mg/L	5	11/04/2022 19:23	199650
Iron	NELAP	0.0250		3.46	mg/L	5	11/04/2022 19:23	199650
Lead	NELAP	0.0010		0.0013	mg/L	5	11/04/2022 19:23	199650
Lithium	*	0.0030		0.0594	mg/L	5	11/04/2022 19:23	199650
Manganese	NELAP	0.0020		0.0462	mg/L	5	11/04/2022 19:23	199650
Molybdenum	NELAP	0.0015		0.0277	mg/L	5	11/04/2022 19:23	199650
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 19:23	199650
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/04/2022 19:23	199650
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	0.00007	mg/L	1	11/04/2022 13:23	199654
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/15/2022 0:00	R322144



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101892-004  
 Matrix: GROUNDWATER

Work Order: 22101892  
 Report Date: 09-Dec-22  
 Client Sample ID: DUP-02  
 Collection Date: 10/27/2022 18:30

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		593	mg/L	1	11/01/2022 14:32	R320406
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		46	mg/L	1	11/01/2022 14:32	R320406
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		950	mg/L	2.5	11/02/2022 14:25	R320569
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		17	mg/L	1	11/03/2022 16:49	R320580
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		2.51	mg/L	1	11/02/2022 14:38	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	40		54	mg/L	10	11/03/2022 16:54	R320588
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		4.98	mg/L	1	11/04/2022 11:21	199650
Magnesium	NELAP	0.0500		2.57	mg/L	1	11/04/2022 11:21	199650
Potassium	NELAP	0.100		3.06	mg/L	1	11/04/2022 11:21	199650
Sodium	NELAP	0.0500		330	mg/L	1	11/04/2022 11:21	199650
Strontium	NELAP	0.0100		0.111	mg/L	1	11/04/2022 11:21	199650
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0019	mg/L	5	11/04/2022 19:30	199650
Arsenic	NELAP	0.0010		0.0018	mg/L	5	11/04/2022 19:30	199650
Barium	NELAP	0.0010		0.0671	mg/L	5	11/04/2022 19:30	199650
Beryllium	NELAP	0.0010	J	0.0005	mg/L	5	11/04/2022 19:30	199650
Boron	NELAP	0.0250		1.48	mg/L	5	11/04/2022 19:30	199650
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 19:30	199650
Chromium	NELAP	0.0015		0.0123	mg/L	5	11/04/2022 19:30	199650
Cobalt	NELAP	0.0010		0.0010	mg/L	5	11/04/2022 19:30	199650
Iron	NELAP	0.0250		3.86	mg/L	5	11/04/2022 19:30	199650
Lead	NELAP	0.0010		0.0017	mg/L	5	11/04/2022 19:30	199650
Lithium	*	0.0030		0.0681	mg/L	5	11/04/2022 19:30	199650
Manganese	NELAP	0.0020		0.0467	mg/L	5	11/04/2022 19:30	199650
Molybdenum	NELAP	0.0015		0.0302	mg/L	5	11/04/2022 19:30	199650
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 19:30	199650
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/04/2022 19:30	199650
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	0.00007	mg/L	1	11/04/2022 13:25	199654
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/15/2022 0:00	R322144



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101892-005  
 Matrix: GROUNDWATER

Work Order: 22101892  
 Report Date: 09-Dec-22  
 Client Sample ID: MW-358  
 Collection Date: 10/27/2022 18:05

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		601	mg/L	1	11/01/2022 14:42	R320406
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		32	mg/L	1	11/01/2022 14:42	R320406
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		1990	mg/L	2.5	11/02/2022 14:26	R320569
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		108	mg/L	10	11/03/2022 17:15	R320580
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		2.43	mg/L	1	11/02/2022 14:40	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	80		688	mg/L	20	11/07/2022 11:23	R320722
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		12.8	mg/L	1	11/04/2022 11:23	199650
Magnesium	NELAP	0.0500		5.66	mg/L	1	11/04/2022 11:23	199650
Potassium	NELAP	0.100		8.56	mg/L	1	11/04/2022 11:23	199650
Sodium	NELAP	0.0500		802	mg/L	1	11/04/2022 11:23	199650
Strontium	NELAP	0.0100		0.419	mg/L	1	11/04/2022 11:23	199650
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0022	mg/L	5	11/04/2022 19:36	199650
Arsenic	NELAP	0.0010		0.0030	mg/L	5	11/04/2022 19:36	199650
Barium	NELAP	0.0010		0.0933	mg/L	5	11/04/2022 19:36	199650
Beryllium	NELAP	0.0010	J	0.0003	mg/L	5	11/04/2022 19:36	199650
Boron	NELAP	0.0250		1.10	mg/L	5	11/04/2022 19:36	199650
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 19:36	199650
Chromium	NELAP	0.0015		0.0125	mg/L	5	11/04/2022 19:36	199650
Cobalt	NELAP	0.0010		0.0022	mg/L	5	11/04/2022 19:36	199650
Iron	NELAP	0.0250		4.33	mg/L	5	11/04/2022 19:36	199650
Lead	NELAP	0.0010		0.0022	mg/L	5	11/04/2022 19:36	199650
Lithium	*	0.0030		0.0621	mg/L	5	11/04/2022 19:36	199650
Manganese	NELAP	0.0020		0.192	mg/L	5	11/04/2022 19:36	199650
Molybdenum	NELAP	0.0015		0.0782	mg/L	5	11/04/2022 19:36	199650
Selenium	NELAP	0.0010		0.0032	mg/L	5	11/04/2022 19:36	199650
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/04/2022 19:36	199650
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	0.00013	mg/L	1	11/04/2022 13:28	199654
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/18/2022 0:00	R322144



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101892-006  
 Matrix: AQUEOUS

Work Order: 22101892  
 Report Date: 09-Dec-22  
 Client Sample ID: EB-04  
 Collection Date: 10/27/2022 19:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:08	199650
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:08	199650
Barium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:08	199650
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:08	199650
Boron	NELAP	0.0250		< 0.0250	mg/L	5	11/04/2022 20:08	199650
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:08	199650
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/04/2022 20:08	199650
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:08	199650
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:08	199650
Lithium	*	0.0030		< 0.0030	mg/L	5	11/04/2022 20:08	199650
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	11/04/2022 20:08	199650
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:08	199650
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/04/2022 20:08	199650
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/04/2022 13:30	199654



# Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101892-007  
 Matrix: AQUEOUS

Work Order: 22101892  
 Report Date: 09-Dec-22

Client Sample ID: EB-05

Collection Date: 10/27/2022 19:08

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:14	199650
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:14	199650
Barium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:14	199650
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:14	199650
Boron	NELAP	0.0250		< 0.0250	mg/L	5	11/04/2022 20:14	199650
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:14	199650
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/04/2022 20:14	199650
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:14	199650
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:14	199650
Lithium	*	0.0030		< 0.0030	mg/L	5	11/04/2022 20:14	199650
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	11/04/2022 20:14	199650
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:14	199650
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/04/2022 20:14	199650
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/04/2022 13:32	199654



# Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101892-008  
 Matrix: GROUNDWATER

Work Order: 22101892  
 Report Date: 09-Dec-22

Client Sample ID: XPW04

Collection Date: 10/28/2022 10:41

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		211	mg/L	1	11/01/2022 14:50	R320406
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		11	mg/L	1	11/01/2022 14:50	R320406
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		484	mg/L	1	11/02/2022 14:26	R320569
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		119	mg/L	5	11/03/2022 17:32	R320580
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.44	mg/L	1	11/02/2022 14:42	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		55	mg/L	5	11/03/2022 17:32	R320588
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100	S	47.9	mg/L	1	11/04/2022 11:58	199650
Magnesium	NELAP	0.0500	S	24.9	mg/L	1	11/04/2022 11:58	199650
Potassium	NELAP	1.00	S	15.8	mg/L	10	11/04/2022 15:58	199650
Sodium	NELAP	0.0500		65.1	mg/L	1	11/04/2022 11:58	199650
<i>Matrix spike control limits for K are not applicable due to high sample/spike ratio.</i>								
<i>Matrix spike control limits for Ca and Mg are not applicable due to high sample/spike ratio.</i>								
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:52	199650
Arsenic	NELAP	0.0010	J	0.0005	mg/L	5	11/04/2022 20:52	199650
Barium	NELAP	0.0010		0.161	mg/L	5	11/04/2022 20:52	199650
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:52	199650
Boron	NELAP	0.0250		1.28	mg/L	5	11/04/2022 20:52	199650
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:52	199650
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/04/2022 20:52	199650
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:52	199650
Iron	NELAP	0.0250		0.212	mg/L	5	11/04/2022 20:52	199650
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:52	199650
Lithium	*	0.0030		0.0108	mg/L	5	11/04/2022 20:52	199650
Manganese	NELAP	0.0020		0.0733	mg/L	5	11/04/2022 20:52	199650
Molybdenum	NELAP	0.0015		0.0174	mg/L	5	11/04/2022 20:52	199650
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:52	199650
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/04/2022 20:52	199650
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/04/2022 13:34	199654
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/16/2022 0:00	R322144



## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101892-009  
 Matrix: GROUNDWATER

Work Order: 22101892  
 Report Date: 09-Dec-22  
 Client Sample ID: DUP-03  
 Collection Date: 10/28/2022 10:55

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		205	mg/L	1	11/01/2022 15:03	R320406
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		15	mg/L	1	11/01/2022 15:03	R320406
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		492	mg/L	1	11/02/2022 14:27	R320569
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		121	mg/L	10	11/03/2022 17:48	R320580
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.44	mg/L	1	11/02/2022 14:46	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		50	mg/L	1	11/03/2022 17:42	R320588
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		49.5	mg/L	1	11/04/2022 11:24	199650
Magnesium	NELAP	0.0500		25.5	mg/L	1	11/04/2022 11:24	199650
Potassium	NELAP	1.00		16.0	mg/L	10	11/04/2022 16:02	199650
Sodium	NELAP	0.0500		66.1	mg/L	1	11/04/2022 11:24	199650
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:20	199650
Arsenic	NELAP	0.0010	J	0.0007	mg/L	5	11/04/2022 20:20	199650
Barium	NELAP	0.0010		0.168	mg/L	5	11/04/2022 20:20	199650
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:20	199650
Boron	NELAP	0.0250		1.26	mg/L	5	11/04/2022 20:20	199650
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:20	199650
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/04/2022 20:20	199650
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:20	199650
Iron	NELAP	0.0250		0.207	mg/L	5	11/04/2022 20:20	199650
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:20	199650
Lithium	*	0.0030		0.0111	mg/L	5	11/04/2022 20:20	199650
Manganese	NELAP	0.0020		0.0752	mg/L	5	11/04/2022 20:20	199650
Molybdenum	NELAP	0.0015		0.0191	mg/L	5	11/04/2022 20:20	199650
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:20	199650
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/04/2022 20:20	199650
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/04/2022 13:45	199654
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/16/2022 0:00	R322144



# Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101892-010  
 Matrix: AQUEOUS

Work Order: 22101892  
 Report Date: 09-Dec-22

Client Sample ID: EB-06

Collection Date: 10/28/2022 13:40

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:26	199650
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:26	199650
Barium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:26	199650
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:26	199650
Boron	NELAP	0.0250		< 0.0250	mg/L	5	11/04/2022 20:26	199650
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:26	199650
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/04/2022 20:26	199650
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:26	199650
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:26	199650
Lithium	*	0.0030		< 0.0030	mg/L	5	11/04/2022 20:26	199650
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	11/04/2022 20:26	199650
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:26	199650
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/04/2022 20:26	199650
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/04/2022 13:48	199654





## Laboratory Results

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

Client: Ramboll  
 Client Project: Vistra Baldwin  
 Lab ID: 22101892-011  
 Matrix: GROUNDWATER

Work Order: 22101892  
 Report Date: 09-Dec-22  
 Client Sample ID: TPZ-164  
 Collection Date: 10/28/2022 13:06

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		276	mg/L	1	11/01/2022 15:09	R320406
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/01/2022 15:09	R320406
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		615	mg/L	2.5	11/02/2022 14:27	R320569
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		127	mg/L	5	11/03/2022 17:50	R320580
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.26	mg/L	1	11/02/2022 14:48	R320491
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		57	mg/L	5	11/03/2022 17:50	R320588
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		67.6	mg/L	1	11/04/2022 11:26	199650
Magnesium	NELAP	0.0500		27.8	mg/L	1	11/04/2022 11:26	199650
Potassium	NELAP	1.00		12.8	mg/L	10	11/04/2022 15:39	199650
Sodium	NELAP	0.0500		77.5	mg/L	1	11/04/2022 11:26	199650
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:33	199650
Arsenic	NELAP	0.0010	J	0.0008	mg/L	5	11/04/2022 20:33	199650
Barium	NELAP	0.0010		0.0610	mg/L	5	11/04/2022 20:33	199650
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:33	199650
Boron	NELAP	0.0250		1.47	mg/L	5	11/04/2022 20:33	199650
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:33	199650
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/04/2022 20:33	199650
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:33	199650
Iron	NELAP	0.0250		5.59	mg/L	5	11/04/2022 20:33	199650
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:33	199650
Lithium	*	0.0030		0.0140	mg/L	5	11/04/2022 20:33	199650
Manganese	NELAP	0.0020		1.19	mg/L	5	11/04/2022 20:33	199650
Molybdenum	NELAP	0.0015		0.0155	mg/L	5	11/04/2022 20:33	199650
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/04/2022 20:33	199650
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/04/2022 20:33	199650
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/04/2022 13:50	199654
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	11/16/2022 0:00	R322144



## Sample Summary

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

**Client:** Ramboll  
**Client Project:** Vistra Baldwin

**Work Order:** 22101892  
**Report Date:** 09-Dec-22

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
22101892-001	MW-394	Groundwater	4	10/27/2022 16:20
22101892-002	MW-158R	Groundwater	4	10/27/2022 15:52
22101892-003	MW-258	Groundwater	4	10/27/2022 18:02
22101892-004	DUP-02	Groundwater	4	10/27/2022 18:30
22101892-005	MW-358	Groundwater	4	10/27/2022 18:05
22101892-006	EB-04	Aqueous	1	10/27/2022 19:00
22101892-007	EB-05	Aqueous	1	10/27/2022 19:08
22101892-008	XPW04	Groundwater	4	10/28/2022 10:41
22101892-009	DUP-03	Groundwater	4	10/28/2022 10:55
22101892-010	EB-06	Aqueous	1	10/28/2022 13:40
22101892-011	TPZ-164	Groundwater	4	10/28/2022 13:06



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22101892

**Client Project:** Vistra Baldwin

**Report Date:** 09-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
22101892-001A	MW-394	10/27/2022 16:20	10/28/2022 14:49		
	Standard Methods 2540 C (Total) 1997, 2011				11/02/2022 12:40
	SW-846 9036 (Total)				11/03/2022 16:31
	SW-846 9214 (Total)				11/02/2022 14:33
	SW-846 9251 (Total)				11/07/2022 10:51
22101892-001B	MW-394	10/27/2022 16:20	10/28/2022 14:49		
	Standard Methods 2320 B (Total) 1997, 2011				11/01/2022 13:50
	Standard Methods 2320 B 1997, 2011				11/01/2022 13:50
22101892-001C	MW-394	10/27/2022 16:20	10/28/2022 14:49		
	See Attached for Subcontracting Analysis				11/15/2022 0:00
22101892-001D	MW-394	10/27/2022 16:20	10/28/2022 14:49		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/03/2022 8:52	11/04/2022 11:16
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/03/2022 8:52	11/04/2022 19:11
	SW-846 7470A (Total)			11/03/2022 9:17	11/04/2022 13:18
22101892-002A	MW-158R	10/27/2022 15:52	10/28/2022 14:49		
	Standard Methods 2540 C (Total) 1997, 2011				11/02/2022 12:57
	SW-846 9036 (Total)				11/07/2022 11:02
	SW-846 9214 (Total)				11/02/2022 14:35
	SW-846 9251 (Total)				11/03/2022 16:38
22101892-002B	MW-158R	10/27/2022 15:52	10/28/2022 14:49		
	Standard Methods 2320 B (Total) 1997, 2011				11/01/2022 14:06
	Standard Methods 2320 B 1997, 2011				11/01/2022 14:06
22101892-002C	MW-158R	10/27/2022 15:52	10/28/2022 14:49		
	See Attached for Subcontracting Analysis				11/15/2022 0:00
22101892-002D	MW-158R	10/27/2022 15:52	10/28/2022 14:49		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/03/2022 8:52	11/04/2022 11:18
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/03/2022 8:52	11/04/2022 19:17
	SW-846 7470A (Total)			11/03/2022 9:17	11/04/2022 13:21
22101892-003A	MW-258	10/27/2022 18:02	10/28/2022 14:49		
	Standard Methods 2540 C (Total) 1997, 2011				11/02/2022 12:58
	SW-846 9036 (Total)				11/03/2022 16:40
	SW-846 9214 (Total)				11/02/2022 14:37
	SW-846 9251 (Total)				11/03/2022 16:46
22101892-003B	MW-258	10/27/2022 18:02	10/28/2022 14:49		
	Standard Methods 2320 B (Total) 1997, 2011				11/01/2022 14:13
	Standard Methods 2320 B 1997, 2011				11/01/2022 14:13



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22101892

**Client Project:** Vistra Baldwin

**Report Date:** 09-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
22101892-003C	MW-258	10/27/2022 18:02	10/28/2022 14:49		
See Attached for Subcontracting Analysis		11/15/2022 0:00			
22101892-003D	MW-258	10/27/2022 18:02	10/28/2022 14:49		
SW-846 3005A, 6010B, Metals by ICP (Total)		11/03/2022 8:52 11/04/2022 11:20			
SW-846 3005A, 6020A, Metals by ICPMS (Total)		11/03/2022 8:52 11/04/2022 19:23			
SW-846 7470A (Total)		11/03/2022 9:17 11/04/2022 13:23			
22101892-004A	DUP-02	10/27/2022 18:30	10/28/2022 14:49		
Standard Methods 2540 C (Total) 1997, 2011		11/02/2022 14:25			
SW-846 9036 (Total)		11/03/2022 16:49			
SW-846 9214 (Total)		11/02/2022 14:38			
SW-846 9251 (Total)		11/03/2022 16:54			
22101892-004B	DUP-02	10/27/2022 18:30	10/28/2022 14:49		
Standard Methods 2320 B (Total) 1997, 2011		11/01/2022 14:32			
Standard Methods 2320 B 1997, 2011		11/01/2022 14:32			
22101892-004C	DUP-02	10/27/2022 18:30	10/28/2022 14:49		
See Attached for Subcontracting Analysis		11/15/2022 0:00			
22101892-004D	DUP-02	10/27/2022 18:30	10/28/2022 14:49		
SW-846 3005A, 6010B, Metals by ICP (Total)		11/03/2022 8:52 11/04/2022 11:21			
SW-846 3005A, 6020A, Metals by ICPMS (Total)		11/03/2022 8:52 11/04/2022 19:30			
SW-846 7470A (Total)		11/03/2022 9:17 11/04/2022 13:25			
22101892-005A	MW-358	10/27/2022 18:05	10/28/2022 14:49		
Standard Methods 2540 C (Total) 1997, 2011		11/02/2022 14:26			
SW-846 9036 (Total)		11/03/2022 17:15			
SW-846 9214 (Total)		11/02/2022 14:40			
SW-846 9251 (Total)		11/07/2022 11:23			
22101892-005B	MW-358	10/27/2022 18:05	10/28/2022 14:49		
Standard Methods 2320 B (Total) 1997, 2011		11/01/2022 14:42			
Standard Methods 2320 B 1997, 2011		11/01/2022 14:42			
22101892-005C	MW-358	10/27/2022 18:05	10/28/2022 14:49		
See Attached for Subcontracting Analysis		11/18/2022 0:00			
22101892-005D	MW-358	10/27/2022 18:05	10/28/2022 14:49		
SW-846 3005A, 6010B, Metals by ICP (Total)		11/03/2022 8:52 11/04/2022 11:23			
SW-846 3005A, 6020A, Metals by ICPMS (Total)		11/03/2022 8:52 11/04/2022 19:36			
SW-846 7470A (Total)		11/03/2022 9:17 11/04/2022 13:28			
22101892-006A	EB-04	10/27/2022 19:00	10/28/2022 14:49		
SW-846 3005A, 6020A, Metals by ICPMS (Total)		11/03/2022 8:52 11/04/2022 20:08			



## Dates Report

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

Client: Ramboll

Work Order: 22101892

Client Project: Vistra Baldwin

Report Date: 09-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	SW-846 7470A (Total)			11/03/2022 9:17	11/04/2022 13:30
22101892-007A	EB-05	10/27/2022 19:08	10/28/2022 14:49		
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/03/2022 8:52	11/04/2022 20:14
	SW-846 7470A (Total)			11/03/2022 9:17	11/04/2022 13:32
22101892-008A	XPW04	10/28/2022 10:41	10/28/2022 14:49		
	Standard Methods 2540 C (Total) 1997, 2011				11/02/2022 14:26
	SW-846 9036 (Total)				11/03/2022 17:32
	SW-846 9214 (Total)				11/02/2022 14:42
	SW-846 9251 (Total)				11/03/2022 17:32
22101892-008B	XPW04	10/28/2022 10:41	10/28/2022 14:49		
	Standard Methods 2320 B (Total) 1997, 2011				11/01/2022 14:50
	Standard Methods 2320 B 1997, 2011				11/01/2022 14:50
22101892-008C	XPW04	10/28/2022 10:41	10/28/2022 14:49		
	See Attached for Subcontracting Analysis				11/16/2022 0:00
22101892-008D	XPW04	10/28/2022 10:41	10/28/2022 14:49		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/03/2022 8:52	11/04/2022 11:58
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/03/2022 8:52	11/04/2022 15:58
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/03/2022 8:52	11/04/2022 20:52
	SW-846 7470A (Total)			11/03/2022 9:17	11/04/2022 13:34
22101892-009A	DUP-03	10/28/2022 10:55	10/28/2022 14:49		
	Standard Methods 2540 C (Total) 1997, 2011				11/02/2022 14:27
	SW-846 9036 (Total)				11/03/2022 17:48
	SW-846 9214 (Total)				11/02/2022 14:46
	SW-846 9251 (Total)				11/03/2022 17:42
22101892-009B	DUP-03	10/28/2022 10:55	10/28/2022 14:49		
	Standard Methods 2320 B (Total) 1997, 2011				11/01/2022 15:03
	Standard Methods 2320 B 1997, 2011				11/01/2022 15:03
22101892-009C	DUP-03	10/28/2022 10:55	10/28/2022 14:49		
	See Attached for Subcontracting Analysis				11/16/2022 0:00
22101892-009D	DUP-03	10/28/2022 10:55	10/28/2022 14:49		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/03/2022 8:52	11/04/2022 11:24
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/03/2022 8:52	11/04/2022 16:02
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/03/2022 8:52	11/04/2022 20:20
	SW-846 7470A (Total)			11/03/2022 9:17	11/04/2022 13:45
22101892-010A	EB-06	10/28/2022 13:40	10/28/2022 14:49		
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/03/2022 8:52	11/04/2022 20:26



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22101892

**Client Project:** Vistra Baldwin

**Report Date:** 09-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
	SW-846 7470A (Total)			11/03/2022 9:17	11/04/2022 13:48
22101892-011A	TPZ-164	10/28/2022 13:06	10/28/2022 14:49		
	Standard Methods 2540 C (Total) 1997, 2011				11/02/2022 14:27
	SW-846 9036 (Total)				11/03/2022 17:50
	SW-846 9214 (Total)				11/02/2022 14:48
	SW-846 9251 (Total)				11/03/2022 17:50
22101892-011B	TPZ-164	10/28/2022 13:06	10/28/2022 14:49		
	Standard Methods 2320 B (Total) 1997, 2011				11/01/2022 15:09
	Standard Methods 2320 B 1997, 2011				11/01/2022 15:09
22101892-011C	TPZ-164	10/28/2022 13:06	10/28/2022 14:49		
	See Attached for Subcontracting Analysis				11/16/2022 0:00
22101892-011D	TPZ-164	10/28/2022 13:06	10/28/2022 14:49		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/03/2022 8:52	11/04/2022 11:26
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/03/2022 8:52	11/04/2022 15:39
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/03/2022 8:52	11/04/2022 20:33
	SW-846 7470A (Total)			11/03/2022 9:17	11/04/2022 13:50



## Quality Control Results

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

Client: Ramboll

Work Order: 22101892

Client Project: Vistra Baldwin

Report Date: 09-Dec-22

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

Batch R320569		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	11/02/2022
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	11/02/2022
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	11/02/2022

Batch R320569		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		988	1000	0	98.8	90	110	11/02/2022
Total Dissolved Solids		20		978	1000	0	97.8	90	110	11/02/2022
Total Dissolved Solids		20		962	1000	0	96.2	90	110	11/02/2022

Batch R320569		SampType: DUP		Units mg/L						
SampID: 22101892-002ADUP										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		500				496.0	0.80	11/02/2022

RPD Limit: 5

Batch R320569		SampType: DUP		Units mg/L						
SampID: 22101892-003ADUP										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		50		945				920.0	2.68	11/02/2022

RPD Limit: 5

Batch R320569		SampType: DUP		Units mg/L						
SampID: 22101892-008ADUP										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		474				484.0	2.09	11/02/2022

RPD Limit: 5

### SW-846 9036 (TOTAL)

Batch R320580		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	11/03/2022

Batch R320580		SampType: LCS		Units mg/L						
SampID: ICV/LCS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		20	20.00	0	98.4	90	110	11/03/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22101892

Client Project: Vistra Baldwin

Report Date: 09-Dec-22

### SW-846 9036 (TOTAL)

Batch R320580		SampType: MS		Units mg/L							Date Analyzed
SampID: 22101892-008AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		50		<b>212</b>	100.0	119.0	92.8	85	115	11/03/2022	

Batch R320580		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 22101892-008AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Sulfate		50		<b>218</b>	100.0	119.0	98.8	211.8	2.79	11/03/2022		

Batch R320718		SampType: MBLK		Units mg/L							Date Analyzed
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		10		<b>&lt; 10</b>	6.140	0	0	-100	100	11/07/2022	

Batch R320718		SampType: LCS		Units mg/L							Date Analyzed
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Sulfate		10		<b>19</b>	20.00	0	97.4	90	110	11/07/2022	

### SW-846 9214 (TOTAL)

Batch R320491		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Fluoride		0.10		<b>&lt; 0.10</b>	0.0370	0	0	-100	100	11/02/2022	

Batch R320491		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Fluoride		0.10		<b>1.01</b>	1.000	0	101.3	90	110	11/02/2022	

Batch R320491		SampType: MS		Units mg/L							Date Analyzed
SampID: 22101892-008AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Fluoride		0.10		<b>2.48</b>	2.000	0.4370	102.4	75	125	11/02/2022	





## Quality Control Results

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

**Client:** Ramboll

**Work Order:** 22101892

**Client Project:** Vistra Baldwin

**Report Date:** 09-Dec-22

### SW-846 9214 (TOTAL)

Batch R320491		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 22101892-008AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		<b>2.50</b>	2.000	0.4370	103.0	2.485	0.48	11/02/2022	

### SW-846 9251 (TOTAL)

Batch R320588		SampType: MBLK		Units mg/L							
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		< 4	0.5000	0	0	-100	100	11/03/2022	

### Batch R320588 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		<b>20</b>	20.00	0	100.4	90	110	11/03/2022	

### Batch R320588 SampType: MS Units mg/L

SampID: 22101892-008AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		20		<b>146</b>	100.0	55.10	91.3	85	115	11/03/2022	

### Batch R320588 SampType: MSD Units mg/L

Batch R320588		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 22101892-008AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		20		<b>149</b>	100.0	55.10	93.5	146.4	1.48	11/03/2022	

### Batch R320722 SampType: MBLK Units mg/L

SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		< 4	0.5000	0	0	-100	100	11/07/2022	

### Batch R320722 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		<b>20</b>	20.00	0	101.4	90	110	11/07/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22101892

Client Project: Vistra Baldwin

Report Date: 09-Dec-22

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

Batch 199650		SampType: MBLK		Units mg/L						
SampID: MBLK-199650										
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	11/04/2022
Lithium		0.0050		< 0.0050	0.0019	0	0	-100	100	11/07/2022
Magnesium		0.0500		< 0.0500	0.0070	0	0	-100	100	11/04/2022
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	11/04/2022
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	11/04/2022
Strontium	*	0.0100		< 0.0100	0.0013	0	0	-100	100	11/04/2022

Batch 199650		SampType: LCS		Units mg/L						
SampID: LCS-199650										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		2.52	2.500	0	101.0	85	115	11/04/2022
Lithium		0.0050		0.523	0.5000	0	104.6	85	115	11/07/2022
Magnesium		0.0500		2.45	2.500	0	97.9	85	115	11/04/2022
Potassium		0.100		2.54	2.500	0	101.6	85	115	11/04/2022
Sodium		0.0500		2.37	2.500	0	95.0	85	115	11/04/2022
Strontium	*	0.0100		0.101	0.1000	0	101.3	85	115	11/04/2022

Batch 199650		SampType: MS		Units mg/L						
SampID: 22101892-008DMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		50.8	2.500	47.94	113.6	75	125	11/04/2022
Magnesium		0.0500		27.1	2.500	24.87	89.3	75	125	11/04/2022
Potassium		1.00	S	16.5	2.500	15.81	29.4	75	125	11/04/2022
Sodium		0.0500		67.4	2.500	65.06	94.8	75	125	11/04/2022

Batch 199650		SampType: MSD		Units mg/L						
SampID: 22101892-008DMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100	S	51.9	2.500	47.94	159.2	50.78	2.22	11/04/2022
Magnesium		0.0500	S	28.0	2.500	24.87	125.3	27.10	3.27	11/04/2022
Potassium		1.00	S	16.4	2.500	15.81	24.9	16.54	0.69	11/04/2022
Sodium		0.0500		68.1	2.500	65.06	120.8	67.43	0.96	11/04/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22101892

Client Project: Vistra Baldwin

Report Date: 09-Dec-22

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

Batch 199650    SampType: MBLK    Units mg/L  
 SampID: MBLK-199650

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	11/04/2022
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	11/04/2022
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	11/04/2022
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	11/04/2022
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	11/04/2022
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	11/04/2022
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	11/04/2022
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	11/04/2022
Iron		0.0250		< 0.0250	0.0115	0	0	-100	100	11/04/2022
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	11/04/2022
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	11/04/2022
Manganese		0.0020		< 0.0020	0.0008	0	0	-100	100	11/04/2022
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	11/04/2022
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	11/04/2022
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	11/04/2022

Batch 199650    SampType: LCS    Units mg/L  
 SampID: LCS-199650

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.492	0.5000	0	98.4	80	120	11/04/2022
Arsenic		0.0010		0.514	0.5000	0	102.8	80	120	11/04/2022
Barium		0.0010		1.97	2.000	0	98.3	80	120	11/04/2022
Beryllium		0.0010		0.0513	0.0500	0	102.5	80	120	11/04/2022
Boron		0.0250		0.530	0.5000	0	105.9	80	120	11/04/2022
Cadmium		0.0010		0.0489	0.0500	0	97.9	80	120	11/04/2022
Chromium		0.0015		0.193	0.2000	0	96.4	80	120	11/04/2022
Cobalt		0.0010		0.515	0.5000	0	103.1	80	120	11/04/2022
Iron		0.0250		2.19	2.000	0	109.6	80	120	11/04/2022
Lead		0.0010		0.500	0.5000	0	100.0	80	120	11/04/2022
Lithium	*	0.0030		0.543	0.5000	0	108.6	80	120	11/04/2022
Manganese		0.0020		0.486	0.5000	0	97.2	80	120	11/04/2022
Molybdenum		0.0015		0.486	0.5000	0	97.2	80	120	11/04/2022
Selenium		0.0010		0.463	0.5000	0	92.6	80	120	11/04/2022
Thallium		0.0020		0.229	0.2500	0	91.6	80	120	11/04/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22101892

Client Project: Vistra Baldwin

Report Date: 09-Dec-22

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

Batch 199650		SampType: MS		Units mg/L							Date Analyzed
SampID: 22101892-008DMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		<b>0.497</b>	0.5000	0	99.3	75	125	11/04/2022	
Arsenic		0.0010		<b>0.508</b>	0.5000	0.0005251	101.4	75	125	11/04/2022	
Barium		0.0010		<b>2.09</b>	2.000	0.1607	96.7	75	125	11/04/2022	
Beryllium		0.0010		<b>0.0542</b>	0.0500	0	108.4	75	125	11/04/2022	
Boron		0.0250		<b>1.84</b>	0.5000	1.278	111.7	75	125	11/04/2022	
Cadmium		0.0010		<b>0.0476</b>	0.0500	0	95.2	75	125	11/04/2022	
Chromium		0.0015		<b>0.192</b>	0.2000	0	95.8	75	125	11/04/2022	
Cobalt		0.0010		<b>0.498</b>	0.5000	0	99.6	75	125	11/04/2022	
Iron		0.0250		<b>2.32</b>	2.000	0.2117	105.5	75	125	11/04/2022	
Lead		0.0010		<b>0.495</b>	0.5000	0	99.1	75	125	11/04/2022	
Lithium	*	0.0030		<b>0.582</b>	0.5000	0.01084	114.2	75	125	11/04/2022	
Manganese		0.0020		<b>0.551</b>	0.5000	0.07331	95.5	75	125	11/04/2022	
Molybdenum		0.0015		<b>0.519</b>	0.5000	0.01743	100.3	75	125	11/04/2022	
Selenium		0.0010		<b>0.455</b>	0.5000	0	91.1	75	125	11/04/2022	
Thallium		0.0020		<b>0.230</b>	0.2500	0	92.1	75	125	11/04/2022	

Batch 199650		SampType: MSD		Units mg/L							RPD Limit: 20	Date Analyzed
SampID: 22101892-008DMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Antimony		0.0010		<b>0.509</b>	0.5000	0	101.8	0.4967	2.41	11/04/2022		
Arsenic		0.0010		<b>0.520</b>	0.5000	0.0005251	103.9	0.5076	2.39	11/04/2022		
Barium		0.0010		<b>2.12</b>	2.000	0.1607	98.0	2.094	1.26	11/04/2022		
Beryllium		0.0010		<b>0.0541</b>	0.0500	0	108.3	0.05420	0.13	11/04/2022		
Boron		0.0250		<b>1.82</b>	0.5000	1.278	108.1	1.836	0.97	11/04/2022		
Cadmium		0.0010		<b>0.0498</b>	0.0500	0	99.6	0.04761	4.45	11/04/2022		
Chromium		0.0015		<b>0.197</b>	0.2000	0	98.7	0.1915	3.07	11/04/2022		
Cobalt		0.0010		<b>0.503</b>	0.5000	0	100.6	0.4978	1.03	11/04/2022		
Iron		0.0250		<b>2.39</b>	2.000	0.2117	109.1	2.322	3.08	11/04/2022		
Lead		0.0010		<b>0.504</b>	0.5000	0	100.9	0.4954	1.77	11/04/2022		
Lithium	*	0.0030		<b>0.582</b>	0.5000	0.01084	114.3	0.5816	0.11	11/04/2022		
Manganese		0.0020		<b>0.563</b>	0.5000	0.07331	97.9	0.5510	2.10	11/04/2022		
Molybdenum		0.0015		<b>0.532</b>	0.5000	0.01743	102.9	0.5189	2.49	11/04/2022		
Selenium		0.0010		<b>0.462</b>	0.5000	0	92.5	0.4554	1.51	11/04/2022		
Thallium		0.0020		<b>0.240</b>	0.2500	0	96.1	0.2303	4.20	11/04/2022		



## Quality Control Results

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

Client: Ramboll

Work Order: 22101892

Client Project: Vistra Baldwin

Report Date: 09-Dec-22

### SW-846 7470A (TOTAL)

Batch 199654		SampType: MBLK		Units mg/L							
SampID: MBLK-199654											
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	11/04/2022	

Batch 199654		SampType: LCS		Units mg/L							
SampID: LCS-199654											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00536	0.0050	0	107.2	85	115	11/04/2022	

Batch 199654		SampType: MS		Units mg/L							
SampID: 22101892-008DMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00499	0.0050	0	99.8	75	125	11/04/2022	

Batch 199654		SampType: MSD		Units mg/L							
SampID: 22101892-008DMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		0.00522	0.0050	0	104.5	0.004991	4.55	11/04/2022	



# Receiving Check List

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

Client: Ramboll

Work Order: 22101892

Client Project: Vistra Baldwin

Report Date: 09-Dec-22

Carrier: Andrew Hardwick

Received By: PRY

Completed by:

Reviewed by:

On:

28-Oct-22

Payton Yoch

On:

28-Oct-22

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

- |   |   |   |  |                                  |
|---|---|---|--|----------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             | Not Present <input type="checkbox"/>   | Temp °C <b>5.6</b>               |
| Type of thermal preservation?                           | None <input type="checkbox"/>           | Ice <input checked="" type="checkbox"/> | Blue Ice <input type="checkbox"/>      | Dry Ice <input type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Reported field parameters measured:                     | Field <input type="checkbox"/>          | Lab <input type="checkbox"/>            | NA <input checked="" type="checkbox"/> |                                  |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |

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

- |   |                              |  |   |
|---|------------------------------|--|---|
| Water – at least one vial per sample has zero headspace?  | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | No VOA vials <input checked="" type="checkbox"/>      |
| Water - TOX containers have zero headspace?               | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | No TOX containers <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt?                       | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | NA <input type="checkbox"/>                           |
| NPDES/CWA TCN interferences checked/treated in the field? | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | NA <input checked="" type="checkbox"/>                |

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

pH strip 83856 - ANC/pyoch - 10/28/2022 5:14:52 PM

Additional Nitric Acid (83726) was needed in MW-394, MW-158R, MW-258, DUP-02, and MW-358 upon arrival at the laboratory. - ANC/pyoch - 10/28/2022 5:15:03 PM

# CHAIN OF CUSTODY

pg. 1 of 2 Work order # 22101892

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

**Client:** Ramboll  
**Address:** 300 S. Wacker Drive  
**City / State / Zip:** Chicago, IL 60606  
**Contact:** Evvan Plank **Phone:** (414) 837-3687  
**E-Mail:** *Evvan.Plank@ramboll.com* **Fax:** \_\_\_\_\_

**Samples on:**  ICE  BLUE ICE  NO ICE *5.6 °C* **LTG#** *3*  
**Preserved in:**  LAB  FIELD **FOR LAB USE ONLY**  
**Lab Notes:**  
*DH 83856 Added HNO3 (637a) to samples MW 358*  
*NW 394 MW 358 XFW-04*  
*NW 158R Dup 3*

Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No  
 Are these samples known to be hazardous?  Yes  No  
 Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section.  Yes  No

**Client Comments:**  
 Part 845 metals: antimony, arsenic, barium, beryllium, boron, cadmium, chromium, cobalt, lead, lithium, mercury, molybdenum, selenium, and thallium (6020, 7470A)  
*not on chain of custody EB-02, EB-03, XFW-04*

**Project Name/Number** *Vistra Baldwin* **Sample Collector's Name** *Andrew Herbigh (Ramboll)*

**Results Requested:**  Standard  1-2 Day (100% Surcharge)  3 Day (50% Surcharge)  
**Billing Instructions:** \_\_\_\_\_ **# and Type of Containers:**

Lab Use Only		Sample Identification	Date/Time Sampled	# and Type of Containers							MATRIX					INDICATE ANALYSIS REQUESTED																																		
				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NAHSO4	OTHER	Drinking Water	Soil	Sludge	Special Waste	Groundwater	ALK B / ALK C	Ca K Mg Na	Chloride Sulfate	Fe / Mn	Fluoride TDS	Part 845 Metals	Part 226/228 (SUB)	Strontium																										
<i>22101892-001</i>	<i>MW-394</i>	<i>10/27/22</i>	<i>16:20</i>	<i>2</i>	<i>3</i>											X	X	X	X	X	X	X	X	X																										
<i>002</i>	<i>MW-158R</i>	<i>10/27/22</i>	<i>15:52</i>	<i>2</i>	<i>3</i>											X	X	X	X	X	X	X	X	X																										
<i>003</i>	<i>MW-25B</i>	<i>10/27/22</i>	<i>18:02</i>	<i>2</i>	<i>3</i>											X	X	X	X	X	X	X	X	X																										
<i>004</i>	<i>DUP-02</i>	<i>10/27/22</i>	<i>18:30</i>	<i>2</i>	<i>3</i>											X	X	X	X	X	X	X	X	X																										
<i>005</i>	<i>MW-358</i>	<i>10/27/22</i>	<i>18:05</i>	<i>2</i>	<i>3</i>											X	X	X	X	X	X	X	X	X																										
<i>006</i>	<i>EB-04</i>	<i>10/27/22</i>	<i>19:00</i>	<i>1</i>								X										X																												
<i>007</i>	<i>EB-05</i>	<i>10/27/22</i>	<i>19:08</i>	<i>1</i>								X										X																												
<i>008</i>	<i>XFW-04</i>	<i>10/28/22</i>	<i>10:41</i>	<i>6</i>	<i>9</i>											X	X	X	X	X	X	X	X	X																										
<i>009</i>	<i>DUP-03</i>	<i>10/28/22</i>	<i>10:55</i>	<i>2</i>	<i>3</i>											X	X	X	X	X	X	X	X	X																										
<i>010</i>	<i>EB-06</i>	<i>10/28/</i>	<i>13:40</i>	<i>1</i>								X										X																												

*MS/MSD - 3x volume*

Relinquished By	Date/Time	Received By	Date/Time
<i>[Signature]</i>	<i>10/28/22 13:47</i>	<i>[Signature]</i>	<i>10/28/22 14:49</i>

# CHAIN OF CUSTODY

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

**Client:** Ramboll  
**Address:** 300 S. Wacker Drive  
**City / State / Zip:** Chicago, IL 60606  
**Contact:** Evvan Plank **Phone:** (414) 837-3687  
**E-Mail:** Evvan.Plank@ramboll.com **Fax:** \_\_\_\_\_

**Samples on:**  ICE  BLUE ICE  NO ICE \_\_\_\_\_ °C **LTG#** \_\_\_\_\_  
**Preserved in:**  LAB  FIELD **FOR LAB USE ONLY**  
**Lab Notes**

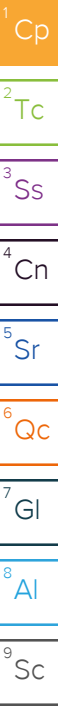
Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No  
 Are these samples known to be hazardous?  Yes  No  
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section.  Yes  No

**Client Comments:**  
 Part 845 metals: antimony, arsenic, barium, beryllium, boron, cadmium, chromium, cobalt, lead, lithium, mercury, molybdenum, selenium, and thallium (6020, 7470A)

Project Name/Number		Sample Collector's Name		MATRIX															INDICATE ANALYSIS REQUESTED													
Vistra Baldwin		Andrew Handwork (Ramboll)		Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	ALK B / ALK C	Ca K Mg Na	Chloride Sulfate	Fe / Mn	Fluoride TDS	Part 845 Metals	Ra226/228 (SUB)	Strontium															
<b>Results Requested</b>		<b>Billing Instructions</b>		<b># and Type of Containers</b>																												
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER																					
<b>Lab Use Only</b>		<b>Sample Identification</b>		<b>Date/Time Sampled</b>																												
22101892 = 011		TPZ-164		10/28/22 13:06		23																										
7E 22101892 = 012		EB-02		10/26/22 18:45																												
0/3		EB-03		10/26/22 18:50																												
0/4		XFW-06		10/28/22 13:06																												
				10-26-22 13:26																												

Relinquished By		Date/Time		Received By		Date/Time	
		10/28/22 13:47				10/28/22 1449	





## TEKLAB, Inc.

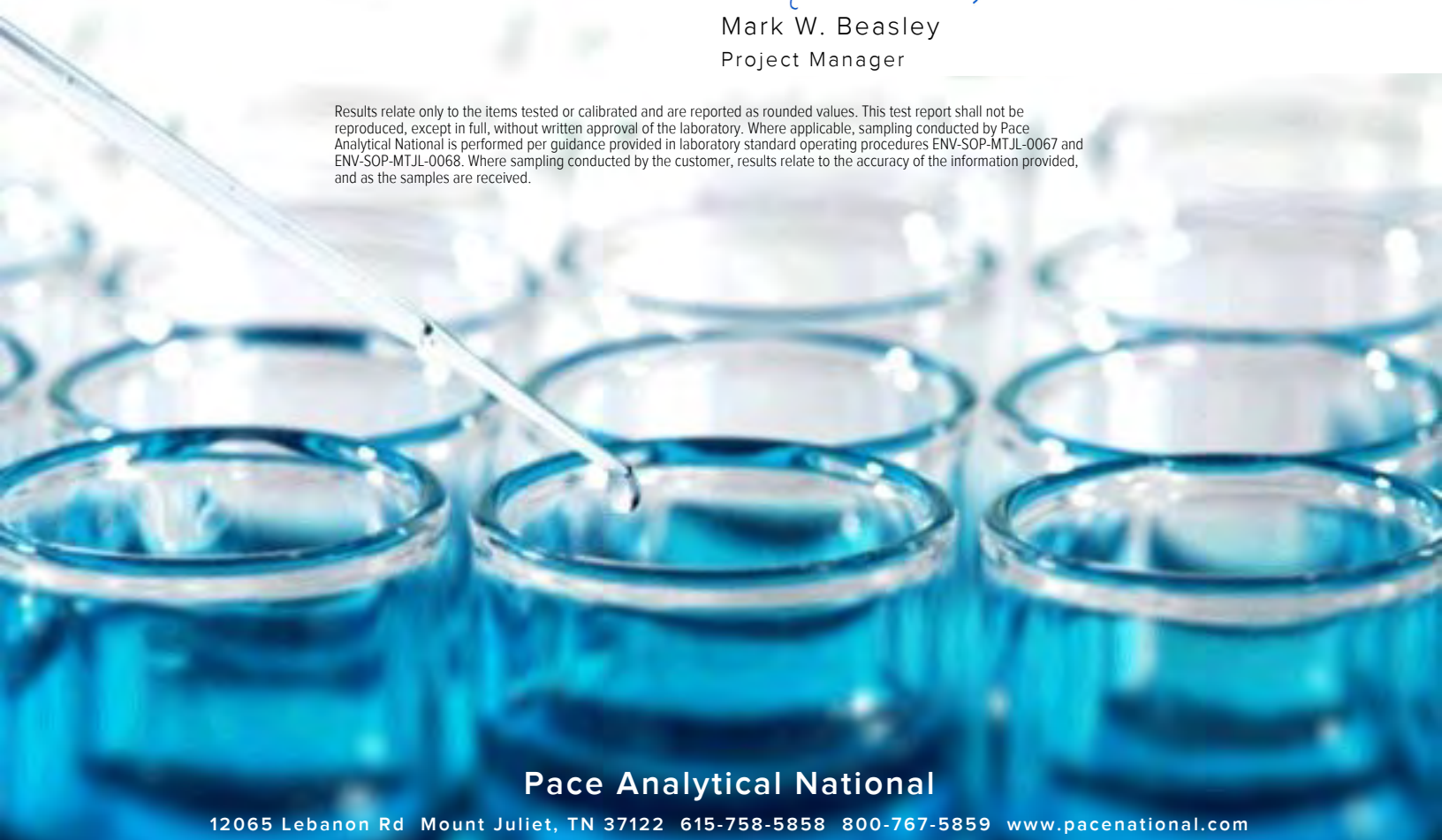
Sample Delivery Group: L1553296  
Samples Received: 11/02/2022  
Project Number: 22101892  
Description:  
Site: 001  
Report To: Elizabeth Hurley  
5445 Horseshoe Lake Road  
Collinsville, IL 62234

Entire Report Reviewed By:



Mark W. Beasley  
Project Manager


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



Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

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# SAMPLE SUMMARY

## 22101892-001 L1553296-01 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/27/22 16:20  
11/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1955734	1	11/08/22 16:06	11/29/22 09:36	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1955515	1	11/11/22 10:29	11/29/22 09:36	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1955515	1	11/11/22 10:29	11/15/22 13:16	RGT	Mt. Juliet, TN

1  
Cp

2  
Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

9  
Sc

## 22101892-002 L1553296-02 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/27/22 15:52  
11/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1955734	1	11/08/22 16:06	11/29/22 09:36	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1955515	1	11/11/22 10:29	11/29/22 09:36	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1955515	1	11/11/22 10:29	11/15/22 13:16	RGT	Mt. Juliet, TN

## 22101892-003 L1553296-03 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/27/22 18:02  
11/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1955734	1	11/08/22 16:06	11/29/22 09:36	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1955515	1	11/11/22 10:29	11/29/22 09:36	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1955515	1	11/11/22 10:29	11/15/22 13:16	RGT	Mt. Juliet, TN

## 22101892-004 L1553296-04 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/27/22 18:30  
11/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1955734	1	11/08/22 16:06	11/29/22 09:36	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1955515	1	11/11/22 10:29	11/29/22 09:36	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1955515	1	11/11/22 10:29	11/15/22 13:16	RGT	Mt. Juliet, TN

## 22101892-005 L1553296-05 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/27/22 18:05  
11/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1955734	1	11/08/22 16:06	11/29/22 09:36	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1955515	1	11/17/22 14:00	11/29/22 09:36	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1955515	1	11/17/22 14:00	11/18/22 19:12	RGT	Mt. Juliet, TN

## 22101892-008 L1553296-06 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/28/22 10:41  
11/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1955736	1	11/10/22 09:00	12/04/22 09:47	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1955515	1	11/11/22 10:29	12/04/22 09:47	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1955515	1	11/11/22 10:29	11/16/22 12:53	RGT	Mt. Juliet, TN

# SAMPLE SUMMARY

## 22101892-009 L1553296-07 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/28/22 10:55  
11/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1955734	1	11/08/22 16:06	11/29/22 09:36	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1955515	1	11/11/22 10:29	11/29/22 09:36	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1955515	1	11/11/22 10:29	11/16/22 12:53	RGT	Mt. Juliet, TN

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

## 22101892-011 L1553296-08 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

10/28/22 13:06  
11/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1955734	1	11/08/22 16:06	11/29/22 09:36	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1955515	1	11/11/22 10:29	11/29/22 09:36	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1955515	1	11/11/22 10:29	11/16/22 12:53	RGT	Mt. Juliet, TN

# CASE NARRATIVE

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



Mark W. Beasley  
Project Manager

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.0345	<u>U</u>	0.235	0.456	11/29/2022 09:36	<a href="#">WG1955734</a>
(T) Barium	96.6			30.0-143	11/29/2022 09:36	<a href="#">WG1955734</a>
(T) Yttrium	109			30.0-136	11/29/2022 09:36	<a href="#">WG1955734</a>

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.204	<u>U</u>	0.345	0.578	11/29/2022 09:36	<a href="#">WG1955515</a>

<sup>4</sup>Cn

<sup>5</sup>Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.204	<u>J</u>	0.253	0.355	11/15/2022 13:16	<a href="#">WG1955515</a>
(T) Barium-133	86.4			30.0-143	11/15/2022 13:16	<a href="#">WG1955515</a>

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.709		0.242	0.442	11/29/2022 09:36	<a href="#">WG1955734</a>
(T) Barium	80.1			30.0-143	11/29/2022 09:36	<a href="#">WG1955734</a>
(T) Yttrium	103			30.0-136	11/29/2022 09:36	<a href="#">WG1955734</a>

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.954		0.360	0.569	11/29/2022 09:36	<a href="#">WG1955515</a>

<sup>4</sup>Cn

<sup>5</sup>Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.245	J	0.267	0.358	11/15/2022 13:16	<a href="#">WG1955515</a>
(T) Barium-133	87.4			30.0-143	11/15/2022 13:16	<a href="#">WG1955515</a>

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.0355	<u>U</u>	0.353	0.682	11/29/2022 09:36	<a href="#">WG1955734</a>
(T) Barium	64.0			30.0-143	11/29/2022 09:36	<a href="#">WG1955734</a>
(T) Yttrium	96.4			30.0-136	11/29/2022 09:36	<a href="#">WG1955734</a>

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

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.515	<u>J</u>	0.458	0.739	11/29/2022 09:36	<a href="#">WG1955515</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.480		0.292	0.285	11/15/2022 13:16	<a href="#">WG1955515</a>
(T) Barium-133	91.1			30.0-143	11/15/2022 13:16	<a href="#">WG1955515</a>



Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.131	<u>U</u>	0.344	0.659	11/29/2022 09:36	<a href="#">WG1955734</a>
(T) Barium	63.1			30.0-143	11/29/2022 09:36	<a href="#">WG1955734</a>
(T) Yttrium	109			30.0-136	11/29/2022 09:36	<a href="#">WG1955734</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.588	<u>J</u>	0.435	0.706	11/29/2022 09:36	<a href="#">WG1955515</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.457		0.266	0.252	11/15/2022 13:16	<a href="#">WG1955515</a>
(T) Barium-133	94.3			30.0-143	11/15/2022 13:16	<a href="#">WG1955515</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	3.28		0.811	1.45	11/29/2022 09:36	<a href="#">WG1955734</a>
(T) Barium	60.9			30.0-143	11/29/2022 09:36	<a href="#">WG1955734</a>
(T) Yttrium	77.9			30.0-136	11/29/2022 09:36	<a href="#">WG1955734</a>

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

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	3.57		0.839	1.47	11/29/2022 09:36	<a href="#">WG1955515</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.284		0.216	0.242	11/18/2022 19:12	<a href="#">WG1955515</a>
(T) Barium-133	98.4			30.0-143	11/18/2022 19:12	<a href="#">WG1955515</a>

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.64		0.223	0.592	12/04/2022 09:47	<a href="#">WG1955736</a>
(T) Barium	95.9			30.0-143	12/04/2022 09:47	<a href="#">WG1955736</a>
(T) Yttrium	104			30.0-136	12/04/2022 09:47	<a href="#">WG1955736</a>

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

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.69		0.258	0.637	12/04/2022 09:47	<a href="#">WG1955515</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0433	<u>U</u>	0.130	0.234	11/16/2022 12:53	<a href="#">WG1955515</a>
(T) Barium-133	88.9			30.0-143	11/16/2022 12:53	<a href="#">WG1955515</a>

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.163	<u>U</u>	0.369	0.718	11/29/2022 09:36	<a href="#">WG1955734</a>
(T) Barium	70.4			30.0-143	11/29/2022 09:36	<a href="#">WG1955734</a>
(T) Yttrium	113			30.0-136	11/29/2022 09:36	<a href="#">WG1955734</a>

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.0275	<u>U</u>	0.376	0.735	11/29/2022 09:36	<a href="#">WG1955515</a>

<sup>4</sup>Cn

<sup>5</sup>Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0275	<u>U</u>	0.0738	0.158	11/16/2022 12:53	<a href="#">WG1955515</a>
(T) Barium-133	86.7			30.0-143	11/16/2022 12:53	<a href="#">WG1955515</a>

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.17		0.346	0.626	11/29/2022 09:36	<a href="#">WG1955734</a>
(T) Barium	64.6			30.0-143	11/29/2022 09:36	<a href="#">WG1955734</a>
(T) Yttrium	98.1			30.0-136	11/29/2022 09:36	<a href="#">WG1955734</a>

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.35		0.395	0.674	11/29/2022 09:36	<a href="#">WG1955515</a>

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.179	J	0.190	0.250	11/16/2022 12:53	<a href="#">WG1955515</a>
(T) Barium-133	101			30.0-143	11/16/2022 12:53	<a href="#">WG1955515</a>

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3866748-1 11/29/22 09:36

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-228	-0.146	<u>U</u>	0.162	0.319
(T) Barium	87.1		87.1	
(T) Yttrium	102		102	

L1549369-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1549369-01 11/29/22 09:36 • (DUP) R3866748-5 11/29/22 09:36

Analyte	Original Result pCi/l	Original Uncertainty + / -	Original MDA pCi/l	DUP Result pCi/l	DUP Uncertainty + / -	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.835	0.211	0.378	0.159	0.300	0.378	1	136	1.84	<u>U</u>	20	3
(T) Barium	90.1			94.6	94.6							
(T) Yttrium	108			112	112							

Laboratory Control Sample (LCS)

(LCS) R3866748-2 11/29/22 09:36

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.96	119	80.0-120	
(T) Barium			92.1		
(T) Yttrium			90.0		

L1552399-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1552399-11 11/29/22 09:36 • (MS) R3866748-3 11/29/22 09:36 • (MSD) R3866748-4 11/29/22 09:36

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	10.0	1.05	9.90	10.2	88.5	91.2	1	70.0-130			2.73		20
(T) Barium		86.6			87.9	93.2							
(T) Yttrium		88.4			108	102							

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3869047-1 12/04/22 09:47

Analyte	MB Result	MB Qualifier	MB Uncertainty	MB MDA
	pCi/l		+ / -	pCi/l
Radium-228	0.235	<u>U</u>	0.145	0.425
(T) Barium	95.0		95.0	
(T) Yttrium	114		114	

L1553297-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1553297-08 12/04/22 09:47 • (DUP) R3869047-5 12/04/22 09:47

Analyte	Original Result	Original Uncertainty	Original MDA	DUP Result	DUP Uncertainty	DUP MDA	Dilution	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	+ / -	pCi/l		%			%	
Radium-228	1.59	0.221	0.578	3.39	0.351	0.578	1	72.1	4.33	<u>J3</u>	20	3
(T) Barium	81.5			84.4	84.4							
(T) Yttrium	104			115	115							

Laboratory Control Sample (LCS)

(LCS) R3869047-2 12/04/22 09:47

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-228	5.00	5.16	103	80.0-120	
(T) Barium			105		
(T) Yttrium			114		

L1553296-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1553296-06 12/04/22 09:47 • (MS) R3869047-3 12/04/22 09:47 • (MSD) R3869047-4 12/04/22 09:47

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-228	10.0	1.64	11.0	11.7	93.8	101	1	70.0-130			6.24		20
(T) Barium		95.9			95.3	91.8							
(T) Yttrium		104			119	113							

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3862431-1 11/15/22 12:48

Analyte	MB Result	MB Qualifier	MB Uncertainty	MB MDA
	pCi/l		+ / -	pCi/l
Radium-226	0.0180	<u>U</u>	0.0313	0.0510
(T) Barium-133	93.4		93.4	

Laboratory Control Sample (LCS)

(LCS) R3862431-2 11/15/22 12:48

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-226	5.02	5.07	101	80.0-120	
(T) Barium-133			87.7		

L1552399-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1552399-11 11/15/22 13:16 • (MS) R3862431-3 11/15/22 12:48 • (MSD) R3862431-5 11/15/22 13:16

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-226	20.0	0.641	18.9	21.7	91.4	105	1	75.0-125			13.6		20
(T) Barium-133		97.5			90.0	89.1							

L1553296-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1553296-06 11/16/22 12:53 • (MS) R3862431-4 11/15/22 12:48 • (MSD) R3862431-6 11/15/22 13:16

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-226	20.0	0.0433	22.5	22.2	112	111	1	75.0-125			1.57		20
(T) Barium-133		88.9			90.6	90.1							

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

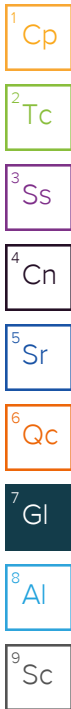
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

### Abbreviations and Definitions

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

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
U	Below Detectable Limits: Indicates that the analyte was not detected.



# ACCREDITATIONS & LOCATIONS

## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

### TEKLAB, INC. Chain of Custody

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

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

Teklab Inc  
5445 Horseshoe Lake Road  
Collinsville, IL 62234

Cooler Temp:  Sampler: A. Hardwick QC Level:

Comments: **Please Issue reports and invoices via email only**  
Please analyze for Radium 226/228 on your standard turn around time.  
Samples collected from an IL site.  
Batch QC is required for all analyses requested. EDD requested.

Project#

Contact:

Email:

Requested Due Date:

Billing/PO:

Phone:

*4553296*

**PLEASE NOTE:**

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

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix	Ra226/228	MS MSD													
-01	22101892-001	10/27/22 1620	HNO3	Groundwater	<input checked="" type="checkbox"/>														
-02	22101892-002	10/27/22 1552	HNO3	Groundwater	<input checked="" type="checkbox"/>														
-03	22101892-003	10/27/22 1802	HNO3	Groundwater	<input checked="" type="checkbox"/>														
-04	22101892-004	10/27/22 1830	HNO3	Groundwater	<input checked="" type="checkbox"/>														
-05	22101892-005	10/27/22 1805	HNO3	Groundwater	<input checked="" type="checkbox"/>														
-06	22101892-008	10/28/22 1041	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>													
-07	22101892-009	10/28/22 1055	HNO3	Groundwater	<input checked="" type="checkbox"/>														
-08	22101892-011	10/28/22 1306	HNO3	Groundwater	<input checked="" type="checkbox"/>														
			HNO3	Groundwater															
			HNO3	Groundwater															
			HNO3	Groundwater															

*Relinquished By	Date/Time	Received By	Date/Time
		<i>J. J. J.</i>	11.02.22 <i>0900</i>

U5532916

DOTO

Tracking Numbers	Temperature
5821 5898 28971	GSA7 19.3 to = 19.3
5821 5898 2901	GSA7 19.4 to = 19.4
5821 5898 2886	GSA7 19.6 to = 19.0
5821 5898 2864	GSA7 19.3 to = 19.3
5821 5898 2875	GSA7 19.4 to = 19.4

**Baldwin Power Plant  
10901 Baldwin Rd.  
BALDWIN, ILLINOIS  
RAMBOLL Project No. 1940102653  
Groundwater Sampling Field Book**

**Luminant**

October 2022

**RAMBOLL**



**Daily Health and Safety Tailgate Meeting**

Date 10-24-22

Time 12:00

Site BALDWIN

Job Number 1940102653

Work to be Performed Training for SVM, Get supplies ready for sample & gauge wells for W's.

Health and Safety Topics Discussed PPE, Drivng hazards, PPEP Rules,

**Attendees**

Name (printed)	Signature	Company
<u>Sammy Miller</u>	<u>[Signature]</u>	<u>Ramboll</u>

Site Safety Officer Conducting Meeting (print)  
Andrew Harsh

Signature  
[Signature]

Company  
Ramboll



**Daily Health and Safety Tailgate Meeting**

Date 10-25-22

Time 0730

Site Baldwin

Job Number 1940102653

Work to be Performed Well gauging + low-flow sampling

Health and Safety Topics Discussed PPE, Cold Temps/Cold Stress, Early Sunset

**Attendees**

Name (printed)
<u>S. Mathew</u>
_____
_____
_____
_____
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_____
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_____

Signature
<u>[Signature]</u>
_____
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Company
<u>Ramboll</u>
_____
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_____

Site Safety Officer Conducting Meeting (print) Andrew Hardwick

Signature [Signature]

Company Ramboll



**Daily Health and Safety Tailgate Meeting**

Date 10-26-22

Time 0730

Site Baldwin

Job Number 1940102653

Work to be Performed Low-Know Shopping @ Men with

Health and Safety Topics Discussed PPE, Safe driving areas, wildlife, Deer/collision hazards, Truck Traffic on-site

**Attendees**

Name (printed)	Signature	Company
<u>Sammy Mallow</u>	<u>[Signature]</u>	<u>Ramboll</u>

Site Safety Officer Conducting Meeting (print)	Signature	Company
<u>Andrew Herb</u>	<u>[Signature]</u>	<u>Ramboll</u>





**Daily Health and Safety Tailgate Meeting**

Date 10-27-22

Time 07:30

Site Baldwin

Job Number 1940102653

Work to be Performed Monitoring well low flow surphy.

Health and Safety Topics Discussed PPC, Cold stress, Hydration

**Attendees**

Name (printed)	Signature	Company
<u>Sammy Mallow</u>	<u>[Signature]</u>	<u>Ramboll</u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
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<u> </u>	<u> </u>	<u> </u>

Site Safety Officer Conducting Meeting (print) Andrew Hurdick Signature [Signature] Company Ramboll



**Daily Health and Safety Tailgate Meeting**

Date 10-28-22

Time 0800

Site Baldwin

Job Number 1940102053

Work to be Performed last day of sample.

Health and Safety Topics Discussed PPE, Driving hazards, test tray loads in cargo of car

**Attendees**

Name (printed)	Signature	Company
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Site Safety Officer Conducting Meeting (print)

Andrew Haskins

Signature

[Signature]

Company

Ramboll

# Activity Summary Report

Date(s): 10/24 through 10/28/2022

Page 1 of 2

Project:	<u>BALDWIN Qt. 22 GW Sample</u>	Location:	<u>BALDWIN, FL</u>
Project #:	<u>1940102653</u>	Personnel:	<u>AFH, SVM</u>
Task #:	<u>1000.LBR</u>	EPA ID:	

Date	Arrival Time	Departure Time	Temperature am / pm	Cloud Cover am / pm	Wind Conditions Am / pm
<u>10/24</u>	<u>12:00</u>	<u>18:00</u>	<u>71 / 77</u>	<u>cloudy / cloudy</u>	<u>13-20 mph Winds SSE all day</u>
<u>10/25</u>	<u>0715</u>	<u>1830</u>	<u>62 / 48</u>	<u>overcast w/ rain</u>	<u>15-20 mph NNW to WNW</u>
<u>10/26</u>	<u><del>0700</del> 0700</u>	<u>1930</u>	<u>42 / 60</u>	<u>partly cloudy</u>	<u>5-10 WNW</u>
<u>10/27</u>	<u>0700</u>	<u>1930</u>	<u>40 / 36</u>	<u>mostly cloudy</u>	<u>5-13 ESE / E</u>
<u>10/28</u>	<u>0800</u>	<u>1400</u>	<u>45 / 63</u>	<u>clear / clear</u>	<u>5-10 NE / ENE</u>

**Summary of Field Notes/Sheets Recorded:**

- Sample Control Log(s) \_\_\_\_\_
- Well Condition Form(s) \_\_\_\_\_
- Water Level and Field Parameters Field Form(s) \_\_\_\_\_
- Well Development And Groundwater Sampling Field Form(s) \_\_\_\_\_
- Chain-of-Custody(s) \_\_\_\_\_
- Equipment Rental Information \_\_\_\_\_
- Other: \_\_\_\_\_

**Contractor Summary:**

- Ingenieer on-site on 10/26/22. Surveyor from (IAE) went around to all new wells & some older ones to shoot elevations/x/y's for TOC, ground  
AFH assisted w/ finding wells & top of prot. casing.  
found a short pond.

**Summary of Equipment On-Site:**

- Alexis Peristaltic, 2 sets of Bladder pumps (MP-10 + MP-50)
- Toolkits w/ MP-50 controller/compressor + add controller comp.
- Buckets - Labware for Tech Lab - Extra bladders
- Water level meters (Honor + Solmot) - Extra standers caps.
- Decim Supplies - Tubing - Rope
- PPE.

**Site Visitor Summary:**

- N/A



# Activity Summary Report

Date(s): 10/24 - 10/28/22  
Project Number: 1940102653

Page 2 of 2

## Summary of Work (include sample locations, types, media, etc...)

- Monday (10/24/22): ~~Setup~~ Sammy took H&S training around 12:00. ~~AF&T~~ Set up supplies in Warehouse "E". Started gauging WLS in afternoon, did not finish.
- Tuesday (10/25) AF&T/SVM continued gauging wells in AM. Switched to low flow supply in PM. MW-305 & MW-203 were sampled by end of day.
- Wednesday (10/26/22) - Cont'd sampling. Samples collected at MW-204, MW-307, MW-309, XPW02, XPW05, XPW01 plus Dup-01, MW-306 & XPW-01 (ms/mod). Thursday (10/27/22): Cont'd sampling - sampled wells MW-370, MW-356, MW-192, MW-193, MW-392, MW-194, MW-393, MW-15BR, MW-394, MW-25B (Dup-02) & MW-358. 10/28/22 (Friday): Finished up sampling by completing XPW-01 & TP2104 (Dup-03 + ms/mod). Clean up warehouse & departed site around 14:00.

## Issues/ Resolution:

- N/A

## Additional Comments:

- LABS picked up samples on 10/26 & 10/27 from site.
- Last batch of samples were dropped off by Rambo II on 10/28/22.

Field Representative:  
Date:

Andrew Hardwick  
10/29/22

Signature:

[Signature]

# Sample Control Log

Project Name: BALDWIN - Oct. 2022 GW Sampling (845)

Analytical Laboratory: TEKlab

Project ID: 1940102653

Geotechnical Laboratory: \_\_\_\_\_

Task ID: 1000, LBR

Field Staff ID: AFH, SM

(ANDREW HARDWILL & SAM MALLOW)

Month Date Year

Month	Date	Year	SAMPLE ID	Sample Media	Sample Location	Sample Depth (feet)	QC Sample Information (duplicate, blank, etc...)	COC Number	Notes (turnaround time, handling notes)
10	25	22	N/A	MW-305	GW	MW-305	17.5' BTOC	—	15:36 STD TAT
10	25			MW-203 <sup>REP</sup>	GW	MW-203	27' BTOC	—	16:46
10	25			EB-01	DI	—	RINSE BLANK	—	18:18
10	26			MW-204	GW	MW-204	~70' BTOC	—	10:18
10	26			MW-307	GW	MW-307	60' BTOC	—	12:25
10	26			MW-304	GW	MW-304	55' BTOC	—	14:00
10	26			XPW02	GW	XPW02	13' BTOC	—	10:35
10	26			XPW05	GW	XPW05	26.8' BTOC	—	13:33
10	26			XPW01	GW	XPW01	12' BTOC	—	15:14
10	26			DUP-01	GW	XPW01	12' BTOC	Duplicate #1	15:25
10	26			MW-306	GW	MW-306	83' BTOC	—	17:05
10	26			XPW06	GW	XPW06	7.5' BTOC	MS/MJD #1	17:26
10	26			EB-02	DI	EB-02	—	RINSE BLANK	18:45
10	26			EB-03	DI	EB-03	—	RINSE BLANK	18:50
10	27			MW-370	GW	MW-370	58' BTOC	—	0850

SUBMITTED TO LAB ON 10/26/22

Submitted to lab on 10/27/22

# Sample Control Log

Project Name: BALDWIN - October 2022 GW Sampling  
 Project ID: 1940102653  
 Task ID: 1000.LBR

Analytical Laboratory: Teklab  
 Geotechnical Laboratory: \_\_\_\_\_  
 Field Staff ID: AFF, SM

Month	Date	Year	SAMPLE ID	Sample Media	Sample Location	Sample Depth (feet)	QC Sample Information (duplicate, blank, etc...)	ATK COC Number	Notes (turnaround time, handling notes)	
10	27	22	N/A	MW-35C	GW	MW-35C	6.5' BTOL	—	Time 10:00 STD-TAT	
10	27	22		MW-192	GW	MW-192	28.5' BTOL	—	Submitted to lab on 10/27/22	
10	27	22		MW-193	GW	MW-193	37' BTOL	—		11:23
10	27	22		MW-392	GW	MW-392	81' BTOL	—		12:35
10	27	22		MW-194	GW	MW-194	26.5' BTOL	—		13:47
10	27	22		MW-393	GW	MW-393	85' BTOL	—		14:25
10	27	22		MW-158R	GW	MW-158R	18.5' BTOL	—		15:52
10	27	22		MW-394	GW	MW-394	62' BTOL	—		Submitted on 10/28
10	27	22		MW-258	GW	MW-258	47' BTOL	—		18:02
10	27	22		DUP-02	GW	<del>DUP</del> MW-258	47' BTOL	DUPLICATE #2		1830
10	27	22		MW-358	GW	MW-358	90' BTOL	—		18:05
10	27	22		EB-04	DI	—	—	RINSE BLANK		19:00
10	27	22		EB-05	DI	—	—	RINSE BLANK		19:08
10	28	22		XPW04	GW	XPW04	16' BTOL	<del>MSM02</del>		10:41
10	28	22	DUP-03	GW	XPW04	16' BTOL	DUPLICATE #3	10:55		
10	28	22	TPZ-164	GW	TPZ-164	8' BTOL	—	13:06		
10	28	22	EB-06	DI	—	—	RINSE BLANK	13:40		

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISSRA  
 Project Number: 1940102653 Task #: 1000LBR Start Date: 10/25/22 Time: 14:29  
 Field Personnel: AFH, SUM Finish Date: 10/25/22 Time: 16:00

### WELL INFORMATION

Well ID: MW-305  
 Casing ID: 2 Inches  
 Screen Interval: ?  
 Borehole Diameter: ? Inches  
 Filter Pack Interval: ?

### EVENT TYPE

- Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: EXISTING (IN-WELL) Bladder Pump w/ MP-10 Controller  
 Tube/Pump Intake Depth: 17.5 BTOL  
 Stabilized Pumping Rate: 140 ml/min

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOL	Time (24-Hour)	Depth FT BTOL	Time (24-Hour)
LNAPL	<u>N/A</u>			
Groundwater	<u>10.28</u>	<u>14:29</u>	<u>11.05</u>	<u>16:00</u>
DNAPL	<u>N/A</u>			
Casing Base	<u>NOT TAKEN DUE TO PUMP IN WELL</u>			

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: \_\_\_\_\_  
 Standing Water Column: N/A feet  
 1 Well Volume: \_\_\_\_\_ Gallons    3 Well Volumes: \_\_\_\_\_ Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons    10 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Produced: \_\_\_\_\_ Gallons  
 Well Purged Dry?  Yes  No

Water Level Serial #: SOLINST MODEL 101 363824 Water Quality Probe Type and Serial #: AT 600 # 454 660

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	14:44	—	10.28	—	17.43	6.75	123.5	6.27	102.06	178.6	Cloudy
purge	14:50		11.490	0.73	17.64	6.76	126.6	5.69	55.96	178.3	Clear
	14:53		11.02	0.01							
	14:56		11.05	0.03							
	14:59		11.05	0.00							
	15:02			0.00							
	15:05			0.00							
	15:08			0.00							

SAMPLE ID: MW-305 AT 15:36  
 - All parameters stabilized at time of sampling except temp + turbidity,

- Temp was dropping at time of sample. (ambient) w/ windy conditions  
 - Turbidity likely falsely high due to silt/suspended particles sticks to turb. sensor. as sample appeared clear.

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VICTA  
 Project Number: 1940102653 Task #: 1000, LBR Start Date: 10/25/22 Time: 14:27  
 Field Personnel: AFT, SVM Finish Date: 10/25/22 Time: 1600

### WELL INFORMATION

Well ID: MW-305  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

elapsel time	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
27:00	Purge	1511		11.05	—							Clear
30:00		1514			—							
33:00		1517			—							
36:00		1520			—							
39:00		1523			—							
42:00		1526			—							
45:00		1529			—	17.14						
48:00		1532			—	17.08						
51:00	(stable) Sample	1535	2.0 gal		—	16.896	6.84	1,139.8	3.79	94.26	161.2	Clear
		15:36	SAMPLED with all P's stable except temp & turbidity									

### NOTES (continued)

SAMPLE ID: MW-305 AT 15:36

### ABBREVIATIONS

Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius
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## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/25/22 Time: 16:17  
 Field Personnel: AGH, SVM Finish Date: \_\_\_\_\_ Time: 1715

### WELL INFORMATION

Well ID: MW-203  
 Casing ID: 2 Inches  
 Screen Interval: Unknown  
 Borehole Diameter: Unknown Inches  
 Filter Pack Interval: Unknown

### EVENT TYPE

- Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: Bladder  
 Tube/Pump Intake Depth: Dedicated existing bladder pump w/ MP-50 Controller  
 Stabilized Pumping Rate: 100 ml/min

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)
LNAPL	<u>N/A</u>			
Groundwater	<u>10.78</u>	<u>16:17</u>	<u>17.98</u>	<u>1715</u>
DNAPL	<u>N/A</u>			
Casing Base	<u>N/A</u>			

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: \_\_\_\_\_  
 Standing Water Column: N/A feet  
 1 Well Volume: \_\_\_\_\_ Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons  
 10 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Produced: \_\_\_\_\_ Gallons  
 Well Purged Dry?  Yes  No

Water Level Serial #: SOLINST 101 S/N: 363824 Water Quality Probe Type and Serial #: AT600 S/N# 454650

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	16:17	—	10.78	—							
purge	16:23		12.57	1.79							
	16:26		13.06	0.49							
	16:29		13.50	0.44							
	16:32		13.80	0.30							
	16:35		14.11	0.31							
	16:38		14.41	0.30							
	16:41		14.69	0.28							

Sample ID: MW-203 at 16:46

*elapsed time*

00:00  
 06:00  
 09:00  
 12:00  
 15:00  
 18:00  
 21:00  
 24:00

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/25/2022 Time: 16:17  
 Field Personnel: AFT, SVM Finish Date: \_\_\_\_\_ Time: 17:15

### WELL INFORMATION

Well ID: MW-203  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

Elapsed  
 Time  
2700  
301977

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
16:44	Pre/Stable	0.75 gal	15.02	0.33		7.08	1062.4		8.85	76.4	Clear
16:46	Sample	all	p's stable except			Temp.					

### NOTES (continued)

SAMPLE 10: MW-203 @ 16:46

### ABBREVIATIONS

Cond. - Actual Conductivity	ORP - Oxidation-Reduction Potential
FT BTOC - Feet Below Top of Casing	SEC - Specific Electrical Conductance
na - Not Applicable	SU - Standard Units
nm - Not Measured	Temp - Temperature
	°C - Degrees Celsius

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION			
Site: <u>BALDWIN</u>	Client: <u>VISTRA</u>		
Project Number: <u>1940102653</u>	Task #: <u>1000.LBR</u>	Start Date: <u>10/26/2022</u>	Time: <u>0630</u>
Field Personnel: <u>AFH, SM</u>	Finish Date: _____	Time: <u>1020</u>	

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-204</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>~68-78' Bgs</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>QED SAMPLE PRO 1.75" w/ MP-50</u>
Borehole Diameter: <u>?</u> inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>~70' BTOC</u>
Filter Pack Interval: <u>?</u>		Stabilized Pumping Rate: <u>70 ml/min</u>

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION			
	INITIAL		FINAL		Volume Calculation Type:		
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	<input type="checkbox"/> Well Casing	<input type="checkbox"/> Borehole	
LNAPL	<u>N/A</u>				<del>Volume Per Foot: _____ feet</del>		
Groundwater	<u>17.81</u>	<u>09:15</u>			Standing Water Column: _____ feet		
DNAPL	<u>N/A</u>				1 Well Volume: _____ Gallons	5 Well Volumes: _____ Gallons	10 Well Volumes: _____ Gallons
Casing Base	<u>75.08</u>	<u>09:15</u>	<u>75.08</u>		Total Volumes Produced: _____ Gallons		

Water Level Serial #: SCANST 363824      Water Quality Probe Type and Serial #: AQUATROLL 6020 454660

WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	09:19	—	17.81	—	10.37	7.83	1224.0	5.75	26.54	+44.5	Clear
purge	09:25		17.40	+0.39	12.48	7.93	1235.3	1.93	21.58	-98.7	
	09:28		17.50	-0.10							
	09:31		17.61	-0.11							
	09:34		17.73	-0.12							
	09:37		17.98	-0.25							
	09:40		18.50	-0.52							
	09:43		18.66	-0.16							

FINAL DRAWDOWN = 2.63'      SAMPLE ID: MW-204 AT 10:18

NOTE: COULD NOT USE EXISTING DEDICATED BLADDER PUMP IN WELL AS TOP FITTINGS WERE LEAKING AIR. (COULDN'T MAINTAIN PRESSURE)

- INSTEAD USED RENTAL (NON-DEDICATED PUMP) AFTER REMOVING DED (LEAKING PUMP) FROM WELL.  
QED SAMPLE PRO 1.75" w/ MP 50 controller / compressor

ELAPSED TIME

00:00

06:00

09:00

12:00

15:00

18:00

21:00

24:00

cont.

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/26/2022 Time: 09:50  
 Field Personnel: AET, SM Finish Date: 10/26/2022 Time: 10:20

### WELL INFORMATION

Well ID: MW-204  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

el. time	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<u>27:00</u>	<u>Purge</u>	<u>09:46</u>		<u>18.80</u>	<u>0.14</u>							<u>Clear</u>
<u>30</u>		<u>09:49</u>		<u>19.08</u>	<u>0.28</u>							<u>Clear</u>
<u>33</u>		<u>09:52</u>		<u>19.23</u>	<u>0.15</u>							
<u>36</u>		<u>09:55</u>		<u>19.46</u>	<u>0.23</u>							
<u>39</u>		<u>09:58</u>		<u>19.64</u>	<u>0.18</u>							
<u>42</u>		<u>10:01</u>		<u>19.80</u>	<u>0.16</u>							
<u>45</u>		<u>10:04</u>		<u>20.03</u>	<u>0.23</u>							
<u>48</u>		<u>10:07</u>		<u>20.13</u>	<u>0.10</u>							
<u>51</u>	<u>▼ (STABLE)</u>	<u>10:10</u>	<u>~1 gal</u>	<u>20.44</u>	<u>0.31</u>	<u>13.76</u>	<u>7.97</u>	<u>1,227.3</u>	<u>0.34</u>	<u>130.32</u>	<u>-136.1</u>	<u>Clear</u>
	<u>SAMPLE</u>	<u>10:18</u>	<u>SAMPLED IN</u>	<u>ALL PC</u>	<u>STABLE EXCEPT</u>	<u>TEMP</u>						

### NOTES (continued)

☑ SAMPLE ID: MW-204 AT 10:18

-70 ml/min flow rate

- Unstable temp likely due to rising ambient temps during purging.

### ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Oct 2022 GW SAMPLING (R1) Client: BAC VISTRIA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/26/2022 Time: 09:50  
 Field Personnel: AFH Finish Date: \_\_\_\_\_ Time: 11:00

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>XPW02</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>~ 7-12 bgs</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>Alexis Peristaltic S/N: 24345</u>
Borehole Diameter: <u>6</u> Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>13" Bore</u>
Filter Pack Interval: <u>~</u>		Stabilized Pumping Rate: <u>175 ml/min</u>

DEPTH MEASUREMENTS					VOLUME CALCULATION AND PRODUCTION INFORMATION			
	INITIAL		FINAL					
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole			
LNAPL	<u>N/A</u>	<u>09:50</u>	<u>4.48</u>	<u>11:00</u>	Volume Per Foot: _____	Standing Water Column: <u>N/A</u> feet		
Groundwater	<u>4.48</u>	<u>09:50</u>	<u>4.48</u>	<u>11:00</u>	1 Well Volume: _____ Gallons	3 Well Volumes: _____ Gallons		
DNAPL	<u>N/A</u>	<u>09:50</u>	<u>4.48</u>	<u>11:00</u>	5 Well Volumes: _____ Gallons	10 Well Volumes: _____ Gallons		
Casing Base	<u>~ 14.51</u>	<u>09:50</u>	<u>~ 14.51</u>	<u>11:00</u>	Total Volumes Produced: _____ Gallons			
Water Level Serial #: <u>HERON</u>					Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No			
					Water Quality Probe Type and Serial #: <u>ATCO # 454650</u>			

### WATER QUALITY INDICATOR PARAMETERS

Elapsed Time	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
0:00	initial	09:55	—	4.48	—	17.51	7.54	875.98	0.22	89.67	-63.8	Clear
06:00	purge	10:01				17.37	7.60	941.55	0.13	21.36	-157.0	
09:00		10:04				DATA IN						
12:00		10:07										
15:00		10:10										
18:00		10:13										
21:00		10:16										
24:00		10:19										

### NOTES:

- SAMPLE ID: XPW02 AT 10:35.
- Sampled after all parameters were stable except for temp.
- Well does not draw-down even w/ higher pumping rates
- HAD difficulty getting temp to stabilize - likely due to colder ambient conditions

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/26/22 Time: 09:50  
 Field Personnel: AFH, SUP Finish Date: 10/26/22 Time: 11:00

### WELL INFORMATION

Well ID: KPWOZ  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

el. time	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
27	Purge	10:22		4.48	—	←	DATA	na	na	na	na	Clear
30		10:25		4.48	—							Clear
33		10:28		4.48	—	17.91			0.21	9.39	→	Clear
36		10:31		4.48	—	17.97			0.22	7.39		Clear
39	↓ (Stable)	10:34	2.5 gal	4.48	—	18.07	7.57	909.98	<del>0.00</del> 0.20	8.22	-148.5	Clear
	SAMPLE	10:35	SAMPLED WELL, ALL PS				Stable	except temp				

### NOTES (continued)

SAMPLE ID: KPWOZ AT 10:35

- sample clear at time of collection
- temp difficult to stabilize w/ cold ambient conditions
- used higher flow rate as a result.

### ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOP - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: \_\_\_\_\_  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/26/22 Time: 10:55  
 Field Personnel: AFH, SKM Finish Date: \_\_\_\_\_ Time: 1235

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-307</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailor <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: _____	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>RENTAL BOARDMAN PUMP (RED)</u>
Borehole Diameter: <u>Unknown</u> Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>60' BTOC</u>
Filter Pack Interval: <u>Unknown</u>		Stabilized Pumping Rate: <u>-150 ml/min</u>

Sample  
pro 1.75'  
w/ MP-50  
controller

DEPTH MEASUREMENTS					VOLUME CALCULATION AND PRODUCTION INFORMATION			
	INITIAL		FINAL		Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole			
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	Volume Per Foot: _____			
LNAPL	<u>N/A</u>				Standing Water Column: <u>N/A</u> feet			
Groundwater	<u>7.55</u>	<u>11:00</u>	<u>17.58</u>	<u>12:35</u>	1 Well Volume: _____ Gallons			
DNAPL	<u>N/A</u>				5 Well Volumes: _____ Gallons			
Casing Base	<u>73.8</u>	<u>11:00</u>	<u>73.8</u>	<u>12:35</u>	10 Well Volumes: _____ Gallons			
					Total Volumes Produced: _____ Gallons			
					Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No			

Water Level Serial #: SOLINST #363 924 Water Quality Probe Type and Serial #: AT600 454660

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Initial	11:27	—	6.95	+0.16	17.15	9.16	1300.7	4.43	104.35	-526	Clear
purge	11:33		8.45	-1.5	16.64	9.27	1442.8	1.03	197.97	-41.5	
	11:36		8.77	-0.32							
	11:39		9.11	-0.34							
	11:42		9.89	-0.78							
	11:45		10.42	-0.53							
	11:48		10.96	-0.44							
	11:51		11.52	-0.66							

elapsed time

0  
6  
9  
12  
15  
18  
21  
24

Ⓢ SAMPLE ID: MW-307 at 12:25

- all param  
 - Unable to lower pump intake below 60', poss. obstruction in well.

- WL went from 7.55' to 6.95' after lowering bladder pump into well.

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/26/2022 Time: 10:55  
 Field Personnel: AGH, SVM Finish Date: 10/26/2022 Time: 12:35

### WELL INFORMATION

Well ID: MW-307  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<u>2700</u> Purge	<u>11:54</u>		<u>12.00</u>	<u>0.08</u>	<b>DATA</b>	<b>N</b>	<b>516</b>	<b>114.51</b>	<b>114.51</b>	<b>114.51</b>	<b>Clear</b>
<u>3000</u>	<u>11:57</u>		<u>12.45</u>	<u>0.45</u>							
<u>3300</u>	<u>12:00</u>		<u>13.05</u>	<u>0.60</u>							
<u>3600</u>	<u>12:03</u>		<u>13.20</u>	<u>0.15</u>							
	<u>12:06</u>		<u>13.66</u>	<u>0.48</u>							
	<u>12:09</u>		<u>14.30</u>	<u>0.62</u>							
	<u>12:12</u>		<u>14.60</u>	<u>0.30</u>							
<u>(Stable)</u>	<u>12:15</u>		<u>15.10</u>	<u>0.50</u>							
<u>Sample</u>	<u>12:25</u>	<u>~2.9213</u>	<u>15.37</u>	<u>0.27</u>	<u>16.57</u>	<u>9.4</u>	<u>1434.5</u>	<u>0.23</u>	<u>114.51</u>	<u>114.51</u>	<u>Clear</u>
<u>due to suspended particles sticking to/disrupting sensor.</u> <u>SVM 10/26/22</u>											

### NOTES (continued)

① SAMPLE ID: MW-307 AT 12:25

### ABBREVIATIONS

Cond. - Actual Conductivity	ORP - Oxidation-Reduction Potential
FT BTOC - Feet Below Top of Casing	SEC - Specific Electrical Conductance
na - Not Applicable	SU - Standard Units
nm - Not Measured	Temp - Temperature
	°C - Degrees Celsius



## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/26/22 Time: 11:10  
 Field Personnel: ART, SUM Finish Date: \_\_\_\_\_ Time: 13:54

### WELL INFORMATION

Well ID: XPW05  
 Casing ID: 2 Inches  
 Screen Interval: ~18-28' bgs  
 Borehole Diameter: 6 Inches  
 Filter Pack Interval: ~16-28'

### EVENT TYPE

- Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: Alexis Peristaltic S/N: 24345  
 Tube/Pump Intake Depth: 26.8' BTOC  
 Stabilized Pumping Rate: 160 ml/min

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)
LNAPL	<u>N/A</u>			
Groundwater	<u>4.82</u>	<u>11:10</u>	<u>4.82</u>	<u>13:54</u>
DNAPL	<u>N/A</u>			
Casing Base	<u>31.79</u>	<u>11:10</u>	<u>31.79</u>	<u>13:54</u>

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: \_\_\_\_\_  
 Standing Water Column: \_\_\_\_\_ feet  
 1 Well Volume: \_\_\_\_\_ Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons  
 10 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Produced: \_\_\_\_\_ Gallons  
 Well Purged Dry?  Yes  No

Water Level Serial #: SOLINST 363824 Water Quality Probe Type and Serial #: AT600 # 454 650

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	11:12	—	4.82	—	18.69	7.11	962.43	1.71	177.71	-62.0	Slightly Cloudy
purge	11:18				17.06	7.16	1046.8	0.17	131.36	-112.4	
	11:21										
	11:24										
	11:27										
	11:30										Clear
	11:33										Clear
	11:36										Clear

*elapsed time (min)*  
 0:00  
6:00  
9:00  
12:00  
15:00  
18:00  
21:00  
24:00

DATA  
 IN  
 Vn - Sita

SAMPLE ID: XPW05 AT 13:33

- water table did not draw-down during pumping.

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/26/2022 Time: 11:10  
 Field Personnel: AFH Finish Date: 10/26/2022 Time: 13:54

### WELL INFORMATION

Well ID: XPW05  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

el. time (min)	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
27	Purge	11:39		4.82	—							Clear
30		11:42		4.82	—							Clear
33		11:45		4.82	—							Clear
36		11:48		4.82	—							Clear
39		11:51		4.82	—							Clear
40 to 1hr		11:52 to 13:11	- left well									Clear
2 hrs	0200	13:12		4.82	—							Clear
2 hr +3	0203	13:15		4.82	—							Clear
2 hr +6	0206	13:18		4.82	—							Clear
2 hr +9	0209	13:22		4.82	—							Clear
2 hr +12	02:12	13:25		4.82	—	17.86	7.85	683.28	0.00	1.84	-152.6	Clear
2 hr +15	02:15	13:28		4.82	—	17.81	7.82	683.38	0.00	1.41	-156.1	Clear
2 hr +18	02:18	13:31	6 gal	4.82	—	17.81	7.82	684.39	0.00	0.88	-159.4	Clear
	SAMPLE	13:33										

### NOTES (continued)

☑ SAMPLE ID: XPW05 AT 13:33.

### ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOP - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

\*\* - LEFT WELL TO CHECK-IN W/ SURVEYOR FROM 11:52 TO 13:11

WELL REMAINED PUMPING WHILE AWAY, ~~WELL~~ UPON RETURNING TO WELL A LEAK IN FLOW-THRU-CELL WAS OBSERVED, AS A RESULT LOGGED PARAM'S BETWEEN 11:52 & 13:11 SHOULD BE CONSIDERED ERRONEOUS/INACCURATE AS FLOW-THRU CELL WAS NOT COMPLETELY FLOW DURING THIS TIME WINDOW.

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION			
Site: <u>BALDWIN</u>	Client: <u>VISTRA</u>	Project Number: <u>1940102653</u>	Task #: <u>1000.LBR</u>
Field Personnel: <u>AEH, SM</u>	Start Date: <u>10/26/22</u>	Time: <u>13:10</u>	Finish Date: _____

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-304</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>~45-55 bgs</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>DEDICATED BLADDER PUMP IN</u>
Borehole Diameter: _____ Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>~55 BTOC</u>
Filter Pack Interval: _____		Stabilized Pumping Rate: <u>175 ml/min</u>

Well w/ MP-50 controller

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION			
INITIAL		FINAL		Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole			
Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	Volume Per-Foot:	Standing Water Column:		
LNAPL	<u>N/A</u>				<u>13</u> feet		
Groundwater	<u>10.33</u>	<u>13.10</u>	<u>14:15</u>	1 Well Volume: _____ Gallons	2 Well Volumes: _____ Gallons		
DNAPL	<u>N/A</u>			5 Well Volumes: _____ Gallons	10 Well Volumes: _____ Gallons		
Casing Base	<u>NOT TAKEN DUE TO PUMP IN WELL</u>			Total Volumes Produced: _____ Gallons			
Water Level Serial #:	<u>SOLINST</u>			Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Water Quality Probe Type and Serial #	<u>AT600 #454660</u>						

**WATER QUALITY INDICATOR PARAMETERS**

elapsed time

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	13:14	—	10.33	—	17.18	8.00	2489.8	2.44	15.10	-8.2	Clear
purge	13:20		12.90	2.57	17.12	7.95	2,491.3	0.60	9.07	11.2	
	13:23		13.20	0.30							
	13:26		13.78	0.58							
	13:29		14.27	0.49							
	13:32		14.98	0.71							
	13:35		15.34	0.36							
	13:38		15.67	0.33							

DATA IN VIEW SIGN

SAMPLE ID: MW-304 AT 14:00.

FINAL DRAWDOWN 7.73'

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/26/22 Time: 13:10  
 Field Personnel: AFF, SM Finish Date: \_\_\_\_\_ Time: 14:15

### WELL INFORMATION

Well ID: MW-304  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

Elapsed Time

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<del>13:00</del> Purge	<del>13:40</del>		<del>16.77</del>								
<del>13:00</del> 213	<del>13:43</del>		<del>16.93</del>	<del>0.66</del>		<del>DATA</del>	<del>IN</del>	<del>VU</del>	<del>SIM</del>		<del>Clear</del>
<del>13:00</del> 3213	<del>13:46</del>		<del>17.23</del>	<del>0.30</del>							
<del>13:00</del> 3513	<del>13:49</del>		<del>17.56</del>	<del>0.33</del>							
<del>13:00</del> 3813	<del>13:52</del>		<del>18.06</del>	<del>0.50</del>							
14:00 (stable) SAMPLES	1355 - 14:00	4.9 gal	18.06	—	16.75	7.89	2,425.6	0.58	0.13	30.9	Clear
All P's Stable											

### NOTES (continued)

SAMPLE ID: MW-304 AT 14:00

### ABBREVIATIONS

Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius
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## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/26/22 Time: 14:10  
 Field Personnel: AFH, SVM Finish Date: 10/26/22 Time: 16:15

### WELL INFORMATION

Well ID: XPW01  
 Casing ID: 2 Inches  
 Screen Interval: ~7-12' bgs  
 Borehole Diameter: 6 Inches  
 Filter Pack Interval: \_\_\_\_\_

### EVENT TYPE

- Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: Alexis Peristaltic S/N 24345  
 Tube/Pump Intake Depth: 12' BDC  
 Stabilized Pumping Rate: 140 ml/min

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)
LNAPL	<u>N/A</u>			
Groundwater	<u>11.45</u>	<u>14:10</u>	<u>11.45</u>	<u>16:15</u>
DNAPL	<u>N/A</u>			
Casing Base	<u>15.17</u>	<u>14:10</u>	<u>15.17</u>	<u>16:15</u>

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: \_\_\_\_\_  
 Standing Water Column: \_\_\_\_\_ feet  
 1 Well Volume: \_\_\_\_\_ Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons  
 10 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Produced: \_\_\_\_\_ Gallons  
 Well Purged Dry?  Yes  No

Water Level Serial #: SOLINST MODEL 101 # 504196 Water Quality Probe Type and Serial #: AT600 S/N: 454650

### WATER QUALITY INDICATOR PARAMETERS

Elapsed Time (min)	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
00:00	initial	<u>14:16</u>	<u>—</u>	<u>11.45</u>	<u>—</u>	<u>19.46</u>	<u>7.12</u>	<u>585.27</u>	<u>0.36</u>	<u>198.26</u>	<u>-11.7</u>	<u>Slightly cloudy</u>
06:00	purge	<u>14:22</u>				<u>18.94</u>	<u>7.05</u>	<u>580.90</u>	<u>0.13</u>	<u>136.70</u>	<u>-33.4</u>	
09:00		<u>14:25</u>										
12:00		<u>14:28</u>										
15:00		<u>14:31</u>										
18:00		<u>14:34</u>										<u>Clear</u>
21:00		<u>14:37</u>										
24:00		<u>14:40</u>										

SAMPLE ID: XPW01 AT 15:14. + DUP-01 AT 15:25.  
 - ALL PARAMETERS STABLE AT SAMPLE COLLECTION TIME EXCEPT TEMP + TURB, TURBIDITY SEEMED TO BE FALSELY  
 EXAGGERATED AS SAMPLE WAS CLEAR DURING COLLECTION.

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/26/2022 Time: 14:10  
 Field Personnel: AFT, SVM Finish Date: 10/26/2022 Time: 16:15

### WELL INFORMATION

Well ID: XPW01  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

elapsed time	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
27	PURGE	14:43	—	11.45	—							Clear
30		14:46										
33		14:49										
36		14:52										
39		14:55										
42		14:58										
45		15:01										
48		15:04										
51		15:07										
54		15:10										
57	▲ (SAMPLE)	15:13	2.25 gal	11.45	—	19.36	7.03	589.96	0.05	252.45	-45.2	
	SAMPLE	15:14	SAMPLED WELL - ALL STABLE EXCEPT TEMP & TURBIDITY									

### NOTES (continued)

■ SAMPLE ID: XPW01 AT 15:14  
 plus  
 DUP-01 AT 15:25.  
 - NO DRAWDOWN DURING PURGING.

### ABBREVIATIONS

Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius
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**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION											
Site: <u>BALDWIN</u>				Client: _____							
Project Number: <u>1940102653</u>		Task #: <u>1000.LBR</u>		Start Date: <u>10/26/22</u>				Time: <u>1600</u>			
Field Personnel: <u>S MALLOW</u>		Finish Date: _____		Time: <u>1730</u>							
WELL INFORMATION			EVENT TYPE			PURGE INFORMATION					
Well ID: <u>MW-306</u>			<input type="checkbox"/> Well Development			Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump					
Casing ID: <u>2</u> inches			<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling			Bailer Type: <u>n/a</u>					
Screen Interval: <u>~72-87' bgs</u>			<input type="checkbox"/> Well Volume Approach Sampling			Pump Type and Serial #: <u>BLADDER (DED)</u>					
Borehole Diameter: <u>Unknown</u> inches			<input type="checkbox"/> Other (Specify below)			Tube/Pump Intake Depth: <u>~83'</u>					
Filter Pack Interval: <u>Unknown</u>						Stabilized Pumping Rate: <u>225 ml/min</u>					
DEPTH MEASUREMENTS					VOLUME CALCULATION AND PRODUCTION INFORMATION						
		INITIAL		FINAL		Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole					
		Depth	Time	Depth	Time	Volume Per Foot: _____					
		FT BTOC	(24-Hour)	FT BTOC	(24-Hour)	Standing Water Column: <u>N/A</u> feet					
LNAPL		<u>N/A</u>				1 Well Volume: _____ Gallons 3 Well Volumes: _____ Gallons					
Groundwater		<u>18.06</u>	<u>1618</u>	<u>34.79</u>	<u>17:30</u>	5 Well Volumes: _____ Gallons 10 Well Volumes: _____ Gallons					
DNAPL		<u>N/A</u>				Total Volumes Produced: _____ Gallons					
Casing Base		<u>DED BLADDER</u>		<u>PUMP NOT MEAS -</u>		Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No					
Water Level Serial #: <u>363829</u> <u>SOLINST</u>				Water Quality Probe Type and Serial #: <u>AQUAROLL 600, 454660</u>							
WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	pH (SU)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>1624</u>		<u>18.06</u>	<u>—</u>	<u>18.21</u>	<u>985.97</u>	<u>9.08</u>	<u>9.70</u>	<u>0.53</u>	<u>54.1</u>	<u>CLEAR</u>
purge	<u>1627</u>		<u>19.21</u>		<u>16.10</u>	<u>756.57</u>	<u>3.22</u>	<u>10.44</u>	<u>3.53</u>	<u>-28.8</u>	<u>I</u>
FINAL	<u>1657</u>	<u>1.75 gal</u>	<u>26.32</u>	<u>8.26</u>	<u>15.06</u>	<u>632.08</u>	<u>1.97</u>	<u>11.11</u>	<u>9.12</u>	<u>-55.9</u>	<u>I</u>
<u>SAMPLED AT 1705, All P's Stable</u>											
NOTES						ABBREVIATIONS					
<u>1 SAMPLE 10: MW-306 at 17:05</u>						Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius					

el. fine (arm)  
0  
3  
(stable) 33

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION																					
Site: <u>BALDWIN</u>				Client: <u>UISTRA</u>																	
Project Number: <u>1940102653</u>				Task #: <u>1000.LBR</u>				Start Date: <u>10/26/22</u>		Time: _____											
Field Personnel: <u>AFH, SVM</u>				Finish Date: _____				Time: _____													
WELL INFORMATION				EVENT TYPE																	
Well ID: <u>MW-306</u>				<input type="checkbox"/> Well Development				<input checked="" type="checkbox"/> Low-Flow / Low Stress Sampling													
Casing ID: <u>2</u> inches				<input type="checkbox"/> Well Volume Approach Sampling				<input type="checkbox"/> Other (Specify): _____													
WATER QUALITY INDICATOR PARAMETERS (continued)																					
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	pH (SU)	Turbidity (NTU)	ORP (mV)	Visual Clarity										
<div style="position: relative; height: 300px;"> </div>																					
NOTES (continued)								ABBREVIATIONS													
<p align="center"><u>AFH</u> <u>10/26/22</u></p>								<table border="0" style="width:100%; font-size: small;"> <tr> <td>Cond. - Actual Conductivity</td> <td>ORP - Oxidation-Reduction Potential</td> </tr> <tr> <td>FT BTOC - Feet Below Top of Casing</td> <td>SEC - Specific Electrical Conductance</td> </tr> <tr> <td>na - Not Applicable</td> <td>SU - Standard Units</td> </tr> <tr> <td>nm - Not Measured</td> <td>Temp - Temperature</td> </tr> <tr> <td></td> <td>°C - Degrees Celcius</td> </tr> </table>				Cond. - Actual Conductivity	ORP - Oxidation-Reduction Potential	FT BTOC - Feet Below Top of Casing	SEC - Specific Electrical Conductance	na - Not Applicable	SU - Standard Units	nm - Not Measured	Temp - Temperature		°C - Degrees Celcius
Cond. - Actual Conductivity	ORP - Oxidation-Reduction Potential																				
FT BTOC - Feet Below Top of Casing	SEC - Specific Electrical Conductance																				
na - Not Applicable	SU - Standard Units																				
nm - Not Measured	Temp - Temperature																				
	°C - Degrees Celcius																				



## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/26/2022 Time: 16:40  
 Field Personnel: AFH, SUM Finish Date: \_\_\_\_\_ Time: 18:30

### WELL INFORMATION

Well ID: XPW06  
 Casing ID: 2 Inches  
 Screen Interval: ~ 5-10' bgs  
 Borehole Diameter: 6 Inches  
 Filter Pack Interval: \_\_\_\_\_

### EVENT TYPE

- Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: Alexis Penstahl SN: 243413  
 Tube/Pump Intake Depth: 7.5' BTCL  
 Stabilized Pumping Rate: 140 ml/min

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTCL	Time (24-Hour)	Depth FT BTCL	Time (24-Hour)
LNAPL	<u>N/A</u>			
Groundwater	<u>2.52</u>	<u>16:40</u>	<u>3.27</u>	<u>18:30</u>
DNAPL	<u>N/A</u>			
Casing Base	<u>10.20</u>	<u>16:40</u>	<u>10.20</u>	<u>18:30</u>

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: \_\_\_\_\_  
 Standing Water Column: \_\_\_\_\_ feet  
 1 Well Volume: \_\_\_\_\_ Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Produced: \_\_\_\_\_ Gallons  
 Well Purged Dry?  Yes  No

Water Level Serial #: SOLNIST # 504176 Water Quality Probe Type and Serial #: AT600 454650

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	16:42	—	2.52	—	18.55	7.32	1,830.6	0.37	128.51	-41.6	Clear
purge	16:48		2.89	-0.32	18.09	7.23	1,828.6	0.10	73.7	-68.4	
	16:57		2.86	-0.02							
	16:54		2.89	-0.03							
	16:57		2.92	-0.03							
	17:00		2.94	-0.02							
	17:03		2.96	-0.02							
	17:06		2.98	-0.02							

SAMPLE ID: XPW06 AT 17:26 (MS/MSD)

-WT drew down only minimally during purging.

→ 1st MS/MSD collected this event  
 (sample volume)

elapsed time (min)

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALWIN Client: VISRA  
 Project Number: 1940102653 Task #: 1000, LBR Start Date: 10/26/22 Time: 16:40  
 Field Personnel: AFH, SVM Finish Date: 10/26/22 Time: 18:30

### WELL INFORMATION

Well ID: XPW06  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

Elapsed Time (min)	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<u>27</u>	<u>Purge</u>	<u>17:09</u>		<u>2.98</u>	<u>0.00</u>							<u>Clear</u>
<u>30</u>		<u>17:12</u>		<u>2.99</u>	<u>0.01</u>							
<u>33</u>		<u>17:15</u>		<u>3.00</u>	<u>0.01</u>							
<u>34:33</u>		<del>17:16</del> <u>17:17</u>		<u>3.01</u>	<u>0.01</u>							
<u>37:33</u>		<u>17:20</u>		<u>3.01</u>	<u>0.00</u>							
<u>40:33</u>		<u>17:23</u>		<u>3.02</u>	<u>0.01</u>							
<u>43:23</u>	<u>(Stable)</u>	<u>17:26</u>	<u>1.6 gal</u>	<u>3.03</u>	<u>0.01</u>	<u>17.62</u>	<u>7.22</u>	<u>1747.8</u>	<u>0.03</u>	<u>14.49</u>	<u>-96.0</u>	<u>Clear</u>
	<u>Sample</u>	<u>17:26</u>	<u>SAMPLED WELL, ALL PARAMETERS STABLE</u>									
			<u>AFH 10/26/2022</u>									

### NOTES (continued)

SAMPLE ID: XPW06 AT 17:26 (MS/MSD)\*

### ABBREVIATIONS

Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius
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## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/27/22 Time: 08:00  
 Field Personnel: AFEL, SUM Finish Date: 10/27/22 Time: 09:10

### WELL INFORMATION

Well ID: MW-370  
 Casing ID: 2 Inches  
 Screen Interval: ~53-63' bgs  
 Borehole Diameter: Unknown Inches  
 Filter Pack Interval: Unknown

### EVENT TYPE

- Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: Ded Bladder Pump w/  
 Tube/Pump Intake Depth: ~53' BDL  
 Stabilized Pumping Rate: 250 ml/min

MPSD  
control/ry  
compr.

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)
LNAPL	<u>N/A</u>			
Groundwater	<u>18.99</u>	<u>0805</u>	<u>31.82</u>	<u>09:10</u>
DNAPL	<u>N/A</u>			
Casing Base	<u>NOT MEASURED - DED PUMP</u>			

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: \_\_\_\_\_  
 Standing Water Column: \_\_\_\_\_ feet  
 1 Well Volume: \_\_\_\_\_ Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons  
 10 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Produced: \_\_\_\_\_ Gallons  
 Well Purged Dry?  Yes  No

Water Level Serial #: SUMT 363 924 Water Quality Probe Type and Serial #: AF600 454662

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	08:10	—	18.99	—	13.41	6.91	5,642.9	5.28	0.47	+220.2	Clear
purge	08:16		21.20	1.21	14.41	7.07	6,239.0	0.33	23.55	+207.2	
	08:19		22.53						10.92	+202.4	
	08:22		23.36								
	08:25		24.02								
	08:28		24.69								
	08:31		25.45								
	08:34		26.22								

elapsed time

DATA IN ✓ - S.H.

SAMPLE ID: MW-370 at 08:50.

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/27/22 Time: 08:00  
 Field Personnel: AFH, SUM Finish Date: \_\_\_\_\_ Time: 09:10

### WELL INFORMATION

Well ID: MW-370  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

el time	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
29	Purge	08:37		26.50	0.28							Clear
50		08:40		27.20	0.70		DATA IN	W		Sites		
33		08:43		28.02	0.82							
56	Stable Sample	08:46	2.4 gal	28.23	0.21	14.95	6.88	5609.7	0.30	0.00	176.8	
	Sample	08:50	- SAMPLED WELL, ALL P: Stable									

### NOTES (continued)

SAMPLE ID: MW-370 @ 08:50

### ABBREVIATIONS

Cond. - Actual Conductivity FT BTOP - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius
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## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000, USB Start Date: 10/27/22 Time: 0850  
 Field Personnel: AFT, SVM Finish Date: \_\_\_\_\_ Time: 1030

### WELL INFORMATION

Well ID: MW-192  
 Casing ID: 2 Inches  
 Screen Interval: 20-30' bgs  
 Borehole Diameter: 6 Inches  
 Filter Pack Interval: 18-30' bgs

### EVENT TYPE

- Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailor  Pump  
 Bailor Type: n/a  
 Pump Type and Serial #: Alexis Perish Inc #24343  
 Tube/Pump Intake Depth: 28.5' BTOL  
 Stabilized Pumping Rate: 120 ml/min

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOL	Time (24-Hour)	Depth FT BTOL	Time (24-Hour)
LNAPL	<u>N/A</u>			
Groundwater	<u>8.34</u>	<u>08:50</u>		<u>10:30</u>
DNAPL	<u>N/A</u>			
Casing Base	<u>33.58</u>	<u>08:50</u>	<u>33.58</u>	<u>10:30</u>

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: \_\_\_\_\_ feet  
 Standing Water Column: N/A feet  
 1 Well Volume: \_\_\_\_\_ Gallons    3 Well Volumes: \_\_\_\_\_ Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons    10 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Produced: \_\_\_\_\_ Gallons  
 Well Purged Dry?  Yes  No

Water Level Serial #: HERON Water Quality Probe Type and Serial #: ATL600 454650

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>08:57</u>	<u>—</u>	<u>8.34</u>	<u>—</u>	<u>14.57</u>	<u>6.82</u>	<u>912.24</u>	<u>3.91</u>	<u>49.72</u>	<u>148.1</u>	<u>Clear</u>
purge	<u>09:03</u>		<u>9.14</u>	<u>0.80</u>	<u>13.84</u>	<u>6.86</u>	<u>894.16</u>	<u>0.46032</u>	<u>10.863.85</u>	<u>1433</u>	
	<u>09:06</u>		<u>9.56</u>	<u>0.42</u>							
	<u>09:09</u>		<u>10.01</u>	<u>0.45</u>							
	<u>09:12</u>		<u>10.51</u>	<u>0.50</u>							
	<u>09:15</u>		<u>10.93</u>	<u>0.42</u>							
	<u>09:18</u>		<u>11.32</u>	<u>0.39</u>							
	<u>09:21</u>		<u>11.73</u>	<u>0.41</u>							

SAMPLE 10: MW-192 @ 10:02

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISFCA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/27/22 Time: 08:50  
 Field Personnel: AEL, SVM Finish Date: \_\_\_\_\_ Time: 10:30

### WELL INFORMATION

Well ID: MW-192  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<u>27</u> Purge	<u>09:24</u>		<u>12.06</u>								
<u>30</u>	<u>09:27</u>		<u>12.44</u>	<u>0.36</u>		DATA IN SINK					
<u>33</u>	<u>09:30</u>		<u>12.66</u>	<u>0.58</u>							
<u>36</u>	<u>09:33</u>		<u>13.11</u>	<u>0.79</u>							
<u>39</u>	<u>09:36</u>		<u>13.42</u>	<u>0.51</u>							
<u>42</u>	<u>09:39</u>		<u>13.74</u>	<u>0.32</u>							
<u>45</u>	<u>09:42</u>		<u>14.03</u>	<u>0.23</u>							
<u>48</u>	<u>09:45</u>		<u>14.33</u>	<u>0.30</u>							
<u>51</u>	<u>09:48</u>		<u>14.63</u>	<u>0.30</u>							
<u>54</u>	<u>09:51</u>		<u>14.92</u>	<u>0.25</u>							
<u>57</u>	<u>09:54</u>		<u>15.21</u>	<u>0.29</u>							
<u>60</u>	<u>09:57</u>		<u>15.51</u>	<u>0.30</u>							
<u>63</u> [Stable]	<u>10:00</u>	<u>2 gal</u>	<u>15.81</u>	<u>0.30</u>	<u>16.2</u>	<u>549.58</u>	<u>6.92</u>	<u>0.26</u>	<u>22.28</u>	<u>76.7</u>	<u>Clear</u>
SAMPLE	<u>10:02</u>	<u>SAMPLED WELL ALL STABLE EXCEPT TURB.</u>									

### NOTES (continued)

MW-192 AT 10:02.

### ABBREVIATIONS

Cond. - Actual Conductivity FT BTOP - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius
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## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION																	
Site: <u>BALDWIN</u>			Client: <u>VISTRA</u>			Project Number: <u>1940102653</u>			Task #: <u>1000.LBR</u>			Start Date: <u>10/27/22</u>			Time: <u>15:10</u>		
Field Personnel: <u>S MALLOW</u>			Finish Date: <u>I</u>			Time: <u>16:45</u>											
WELL INFORMATION				EVENT TYPE				PURGE INFORMATION									
Well ID: <u>MW-294</u>				<input type="checkbox"/> Well Development <input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling <input type="checkbox"/> Well Volume Approach Sampling <input type="checkbox"/> Other (Specify below)				Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump									
Casing ID: <u>2</u> Inches								Bailer Type: <u>n/a</u>									
Screen Interval: <u>~73-83' bags</u>								Pump Type and Serial #: <u>BLADDER (SAMPLE PLO 1.75)</u>									
Borehole Diameter: <u>Unknown 6</u> Inches								Tube/Pump Intake Depth: <u>~62'</u>									
Filter Pack Interval: <u>Unknown 71-83' bags</u>								Stabilized Pumping Rate: <u>250 ml/min</u>									
DEPTH MEASUREMENTS					VOLUME CALCULATION AND PRODUCTION INFORMATION												
		INITIAL		FINAL		Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole											
		Depth	Time	Depth	Time	Volume Per Foot:											
		FT BTOC	(24-Hour)	FT BTOC	(24-Hour)	Standing Water Column: <u>N/A</u> feet											
LNAPL		<u>N/A</u>				1 Well Volume: _____ Gallons		3 Well Volumes: _____ Gallons									
Groundwater		<u>6.35</u>	<u>15:20</u>		<u>16:45</u>	5 Well Volumes: _____ Gallons		10 Well Volumes: _____ Gallons									
DNAPL		<u>N/A</u>				Total Volumes Produced: _____ Gallons											
Casing Base		<u>87.38</u>	<u>15:20</u>	<u>87.38</u>	<u>16:45</u>	Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No											
Water Level Serial #: <u>SOLINST 3123824</u>				Water Quality Probe Type and Serial #: <u>AT600 454 660</u>													
WATER QUALITY INDICATOR PARAMETERS																	
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	pH (SU)	Turbidity (NTU)	ORP (mV)	Visual Clarity						
initial	1530	0 gal	6.35	—	25.76	3.42	2.85	7.50	34.92	+33.1	CLEAR						
purge	1530		5.80		19.04	3,879.0	0.79	7.53	11.95	-73.7	I						
FINAL	1612	2.8 gal	15.43	9.08	17.79	3,893.9	0.16	7.39	8.52	-120.8	CLEAR						
SAMPLED AT 1620, ALL PARAMS STABLE EXCEPT TEMP, WINDY CONDITIONS AND INTERMITTENT SUNSHINE																	
NOTES						ABBREVIATIONS											
LIGHT <sup>SM</sup> SOME BUBBLES IN FLOW THROUGH CELL DURING PURGING						Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celcius											

" w/ MP50 controlled pump

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION													
Site: <u>VISTRA</u>				Client: <u>VISTRA</u>									
Project Number: <u>1940102653</u>			Task #: <u>1000.LBR</u>			Start Date: <u>10/27/22</u>			Time: _____				
Field Personnel: <u>ATH, SVM</u>				Finish Date: _____				Time: _____					
WELL INFORMATION						EVENT TYPE							
Well ID: <u>MW-394</u>						<input type="checkbox"/> Well Development <input checked="" type="checkbox"/> Low-Flow / Low Stress Sampling							
Casing ID: <u>2</u> inches						<input type="checkbox"/> Well Volume Approach Sampling <input type="checkbox"/> Other (Specify): _____							
WATER QUALITY INDICATOR PARAMETERS (continued)													
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	pH (SU)	Turbidity (NTU)	ORP (mV)	Visual Clarity		
<p style="font-size: 2em; opacity: 0.5; transform: rotate(-45deg); position: absolute; top: 50%; left: 50%;"> <del>ATH 10/27/22</del> </p>													
NOTES (continued)							ABBREVIATIONS						
<p style="font-size: 1.5em;">SEE DATA ON FRONT PAGE</p> <p style="font-size: 1.5em; margin-top: 20px;">ATH 10/27/22</p>							<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">                     Cond. - Actual Conductivity                      FT BTQC - Feet Below Top of Casing                      na - Not Applicable                      nm - Not Measured                 </td> <td style="width: 50%;">                     ORP - Oxidation-Reduction Potential                      SEC - Specific Electrical Conductance                      SU - Standard Units                      Temp - Temperature                      °C - Degrees Celcius                 </td> </tr> </table>					Cond. - Actual Conductivity FT BTQC - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celcius
Cond. - Actual Conductivity FT BTQC - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celcius												



## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102502653 Task #: 1000.LBR Start Date: 10/27/22 Time: 09:25  
 Field Personnel: AFT, SVM Finish Date: 10/27/22 Time: 10:22

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-356</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>~5.5-6.5' bgs</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>DEDICATED BLADDER Pump w/ MPD</u>
Borehole Diameter: <u>?</u> Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>~6.5' BTOL</u>
Filter Pack Interval: <u>?</u>		Stabilized Pumping Rate: <u>250 ml/min</u>

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION			
	INITIAL		FINAL		Volume Calculation Type:		Standing Water Column: <u>N/A</u> feet
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	<input type="checkbox"/> Well Casing	<input type="checkbox"/> Borehole	
LNAPL	<u>N/A</u>	<u>09:25</u>	<u>10.57</u>	<u>10:22</u>	Volume Per Foot: <u>N/A</u>		
Groundwater	<u>4.46</u>	<u>09:25</u>	<u>10.57</u>	<u>10:22</u>	1 Well Volume: <u>N/A</u> Gallons	3 Well Volumes: <u>N/A</u> Gallons	
DNAPL	<u>N/A</u>				5 Well Volumes: <u>N/A</u> Gallons	10 Well Volumes: <u>N/A</u> Gallons	
Casing Base	<u>NOT MEASURED DUE TO IN-WALL PUMP</u>				Total Volumes Produced: <u>N/A</u> Gallons		
					Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No		

Water Level Serial #: SOLINST 363824 Water Quality Probe Type and Serial #: AT600 454660

### WATER QUALITY INDICATOR PARAMETERS

elapsed time

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	09:30	—	4.46	—	14.95	7.25	1294.6	4.80	0.11	+126.2	Clear
purge	09:36		5.78	1.32	15.09	7.12	1275.2	0.73	35.50	+68.1	
	09:39		6.22	0.44							
	09:42		6.45	0.23							
	09:45		7.09	0.64							
	09:46		7.75	0.66							
	09:51		7.98	0.23							
Sample	09:54	1.5 gal	8.27	0.29	15.12	7.12	1147.5	0.84	0.00	74.2	

SAMPLE 1000 - SAMPLE NUMBER WELL - ALL PARAMETERS STABLE

SAMPLE ID: MW-356 AT 10:00.

MPD compl cont.

454660

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: \_\_\_\_\_ Client: \_\_\_\_\_  
 Project Number: \_\_\_\_\_ Task #: \_\_\_\_\_ Start Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Field Personnel: \_\_\_\_\_ Finish Date: \_\_\_\_\_ Time: \_\_\_\_\_

### WELL INFORMATION

Well ID: \_\_\_\_\_  
 Casing ID: \_\_\_\_\_ inches

### EVENT TYPE

- Well Development       Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling       Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity

*10/27/02*  
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### NOTES (continued)

### ABBREVIATIONS

Cond. - Actual Conductivity	ORP - Oxidation-Reduction Potential
FT BTOC - Feet Below Top of Casing	SEC - Specific Electrical Conductance
na - Not Applicable	SU - Standard Units
nm - Not Measured	Temp - Temperature
	°C - Degrees Celsius

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/27/2022 Time: 10:45  
 Field Personnel: AFT, SM Finish Date: 10/27/2022 Time: 11:40

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-193</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>30.5-40.5' B&amp;S</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>Penstaltic Alexis</u>
Borehole Diameter: <u>6</u> Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>37' B&amp;C</u>
Filter Pack Interval: _____		Stabilized Pumping Rate: <u>120 ml/min</u>

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION			
	INITIAL		FINAL		Volume Calculation Type:		Standing Water Column: _____ feet
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	<input type="checkbox"/> Well Casing	<input checked="" type="checkbox"/> Borehole	
LNAPL	<u>N/A</u>				<del>Volume Per Foot: _____</del>		
Groundwater	<u>9.02</u>	<u>10:45</u>	<u>9.73</u>	<u>11:40</u>	<del>1 Well Volume: _____ Gallons</del>		<u>3</u> Well Volumes: _____ Gallons
DNAPL	<u>N/A</u>				<del>5 Well Volumes: _____ Gallons</del>		<u>10</u> Well Volumes: _____ Gallons
Casing Base					<del>Total Volumes Produced: _____ Gallons</del>		

Water Level Serial #: HERON Water Quality Probe Type and Serial #: AQUATROL # 454650

### WATER QUALITY INDICATOR PARAMETERS

Elapsed Time	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<u>0:00</u>	<u>initial</u>	<u>10:49</u>	<u>—</u>	<u>9.02</u>	<u>—</u>	<u>22.10</u>	<u>7.01</u>	<u>974.59</u>	<u>2.74</u>	<u>60.10</u>	<u>102.7</u>	<u>Clear</u>
<u>6:00</u>	<u>purge</u>	<u>10:55</u>		<u>9.40</u>	<u>0.38</u>	<u>18.63</u>	<u>6.92</u>	<u>967.71</u>	<u>0.25</u>	<u>24.08</u>	<u>-42.7</u>	<u>Clear</u>
<u>9:00</u>		<u>10:58</u>		<u>9.44</u>	<u>0.04</u>							
<u>12:00</u>		<u>11:01</u>		<u>9.47</u>	<u>0.03</u>							
<u>15:00</u>		<u>11:04</u>		<u>9.50</u>	<u>0.03</u>							
<u>18:00</u>		<u>11:07</u>		<u>9.51</u>	<u>0.01</u>							
<u>21:00</u>		<u>11:10</u>		<u>9.52</u>	<u>0.01</u>							
<u>24:00</u>		<u>11:13</u>		<u>9.53</u>	<u>0.01</u>							

• SAMPLE ID: MW-193 AT 11:23.

— Turbidity possibly giving inaccurate readings due (partly checked) to residue on sensor, sample was clear at collection time

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 0001LBR Start Date: 10/27/22 Time: 10:45  
 Field Personnel: AFT, SM Finish Date: 11:40

### WELL INFORMATION

Well ID: MW-193  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Purge	11:16		9.56	0.03							Clear
	11:19		9.57	0.01							Clear
stable	11:22	1 gallon	9.58	0.01	18.57	6.96	894.74	0.15	594.03	-56.7	Clear
	11:23	→ SAMPLED WELL - ALL P'S STABLE									

### NOTES (continued)

SAMPLE ID: MW-193 AT 11:23.

-120 ml/min Purge

### ABBREVIATIONS

Cond. - Actual Conductivity	ORP - Oxidation-Reduction Potential
FT BTOC - Feet Below Top of Casing	SEC - Specific Electrical Conductance
na - Not Applicable	SU - Standard Units
nm - Not Measured	Temp - Temperature
	°C - Degrees Celsius

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/27/2022 Time: 11:45  
 Field Personnel: AGI, SVM Finish Date: \_\_\_\_\_ Time: 12:53

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-392</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>74-84' bgs</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>RED SAMPLE P20 1.75" w/ MP-50</u>
Borehole Diameter: <u>6</u> Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>8' BTOL</u>
Filter Pack Interval: <u>72-84' bgs</u>		Stabilized Pumping Rate: <u>200 ml/min</u>

DEPTH MEASUREMENTS					VOLUME CALCULATION AND PRODUCTION INFORMATION			
	INITIAL		FINAL		Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole			
	Depth FT BTOL	Time (24-Hour)	Depth FT BTOL	Time (24-Hour)	Volume Per Foot: _____			
LNAPL	<u>N/A</u>	<u>11:45</u>	<u>25.12</u>	<u>12:53</u>	Standing Water Column: _____ feet			
Groundwater	<u>8.55</u>	<u>11:45</u>	<u>25.12</u>	<u>12:53</u>	1 Well Volume: _____ Gallons			
DNAPL	<u>N/A</u>	<u>11:45</u>	<u>88.26</u>	<u>12:53</u>	5 Well Volumes: _____ Gallons			
Casing Base	<u>88.26</u>	<u>11:45</u>	<u>88.26</u>	<u>12:53</u>	10 Well Volumes: _____ Gallons			
					Total Volumes Produced: _____ Gallons			
					Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No			

Water Level Serial #: 363824 Water Quality Probe Type and Serial #: AT602 454 660

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	11:45	—	8.55	—	18.81	6.91	24378	1.58	72.84	+113.6	Clear
purge	11:51		9.89	1.34	18.79	6.93	23364	1.55	70.34	+111.2	
	11:54		11.02	1.13							
	11:57		12.14	1.12							
	12:00		13.33	1.19							
	12:03		14.14	0.81							
	12:06		14.85	0.71							
	12:09		15.63	0.78							

DATA IN VU SITU

SAMPLE ID: MW-392 AT 12:35  
 - ALL PARAMETERS STABLE AT SAMPLE TIME EXCEPT FOR TEMP & TURBIDITY. SIGNIFICANT AMOUNTS OF BUBBLES  
 WELL OBSERVED IN FLOW-THROUGH CELL PURSE Purging.

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/27/22 Time: 11:45  
 Field Personnel: AFH, SVM Finish Date: 10/27/22 Time: 12:53

### WELL INFORMATION

Well ID: MW-392  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

Elapsed Time (min)	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
27	PURGE	12:12		16.34								CLEAR
30		12:15		17.11	0.76							
33		12:18		18.03	0.92							
36		12:21		18.85	0.82							
39		12:24		19.30	0.45	18.73	6.98	2271.2	3.54	59.48	108.3	
42		12:27		19.97	0.67	18.80	7.00	2263.8	3.65	48.49	108.2	
45	(STABLE) SAMPLE	12:30	2.4 gal	20.70	0.73	18.70	6.98	2256.0	3.76	45.30	108.3	CLEAR
<p>           1            SAMPLE 12:35 - ALL P5 Stable except temp &amp; turbidity            AFH            10/27/22         </p>												

### NOTES (continued)

SAMPLE ID: MW-392 AT 12:35  
 - WELL WIZARD COMPRESSOR OVERHEATED & SHUT DOWN DURING PURGING, REPLACED W/ MP50 controller/compressor & cont'd purging w/ no further issues.

### ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/27/2022 Time: 13:00  
 Field Personnel: AEL, SUM Finish Date: \_\_\_\_\_ Time: 14:25

### WELL INFORMATION

Well ID: MW-194  
 Casing ID: 2 Inches  
 Screen Interval: 18-26' bgs  
 Borehole Diameter: 6 Inches  
 Filter Pack Interval: 14-26'

### EVENT TYPE

- Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: Alexis Penstaltic #24343  
 Tube/Pump Intake Depth: ~ 26.5' BTDC  
 Stabilized Pumping Rate: 120 ml/min

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTDC	Time (24-Hour)	Depth FT BTDC	Time (24-Hour)
LNAPL	<u>N/A</u>			
Groundwater	<u>13:00</u>	<u>6.90</u>	<u>20.73</u>	<u>14:25</u>
DNAPL	<u>N/A</u>			
Casing Base	<u>13:00</u>	<u>31.50</u>	<u>31.50</u>	<u>14:25</u>

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: \_\_\_\_\_  
 Standing Water Column: \_\_\_\_\_ feet  
 1 Well Volume: \_\_\_\_\_ Gallons    3 Well Volumes: \_\_\_\_\_ Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons    10 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Produced: \_\_\_\_\_ Gallons  
 Well Purged Dry?  Yes  No

Water Level Serial #: SOLINST ~~57426~~ 363824 Water Quality Probe Type and Serial #: AT600 - 454650

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Initial	13:07	—	6.90	—	20.53	6.93	902.33	4.02	87.24	69.7	Clear
purge	13:13		8.60	1.70	19.57	6.89	902.38	3.28	22.96	69.9	
	13:16		9.16	0.56							
	13:19		9.76	0.60							
	13:22		10.29	0.45							
	13:25		10.82	0.53							
	13:28		11.37	0.57							
	13:31		11.93	0.54							

① SAMPLE 10: MW-194 AT 13:47

- Turbidity sensor issues during purging likely due to suspended particles sticking to sensor;  
 Sample clear at time of collection

el  
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 24

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISKA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/27/2022 Time: 13:00  
 Field Personnel: AFL, SVM Finish Date: 10/27/2022 Time: 1425

### WELL INFORMATION

Well ID: MW-194  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

el. time (min)	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
27	Purge	1334		12.49	0.56	DATA IN Vh - SITE	na	na	na	na	na	Clear
30		1337		13.04	0.55							Clear
33		13:40		13.45	0.41							Clear
36		13:43		14.01	0.56							Clear
39	(SAMPLE) SAMPLE	13:46	1.3 gal	14.50	0.49							19.27
		13:47	All parameters stable - sampled well									

### NOTES (continued)

SAMPLE ID: MW-194 #13:47.

### ABBREVIATIONS

Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius
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## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000-LBR Start Date: 10/27/22 Time: 13:20  
 Field Personnel: AH SUM Finish Date: 10/27/22 Time: 15:00

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-393</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>75-85' bgs</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>QED SAMPLE PUMP 1.75' BLANKET PUMP w/ MP-SD</u>
Borehole Diameter: <u>6</u> Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>~85' BTPC</u>
Filter Pack Interval: <u>73-85</u>		Stabilized Pumping Rate: <u>250 ml/min</u>

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION				
	INITIAL		FINAL					
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)				
LNAPL	<u>N/A</u>				Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole			
Groundwater	<u>9.76</u>	<u>13:40</u>		<u>15:00</u>	Volume Per Foot: _____			
DNAPL	<u>N/A</u>				Standing Water Column: _____ feet			
Casing Base	<u>NOT TAKEN</u>				1 Well Volume: _____ Gallons	3 Well Volumes: _____ Gallons		
					5 Well Volumes: _____ Gallons	10 Well Volumes: _____ Gallons		
					Total Volumes Produced: _____ Gallons			
					Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No			

Water Level Serial #: SOLINST 363824 Water Quality Probe Type and Serial #: ATCOO S/N: 454660

el. time  
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WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	13:48	—	9.76	—	19.72	7.02	2954.9	3.85	8.79	+17.0	Clear
purge	13:54		11.14	1.38	18.60	7.27	3229.0	0.41	52.05	-61.4	
	13:57		11.73	0.19							
	14:00		12.54	0.81							
	14:03		13.42	0.88							
	14:06		14.25	0.83							
	14:09		15.24	1.01							
	14:12		16.32	1.06							

DATA IN VA SITE

- SAMPLE ID: MW-393 AT 14:25.  
 - SIGNIFICANT AMOUNTS OF BUBBLES OBSERVED ENTERING FLOW-THROUGH CELL DURING PURGING.

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/27/22 Time: 13:20  
 Field Personnel: AFH, SVM Finish Date: \_\_\_\_\_ Time: 15:00

### WELL INFORMATION

Well ID: MW-393  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

Elapsed Time	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<u>27</u>	<u>PURGE</u>	<u>1415</u>	<del>16.83</del>	<u>16.83</u>	<u>0.51</u>	<u>DATA IN</u>	<u>IN</u>	<u>na - situ</u>				<u>CLEAR</u>
<u>30</u>	<u>PURGE(SAMPLE)</u>	<u>1418</u>	<del>17.64</del>	<u>17.64</u>	<u>0.81</u>	<u>18.59</u>	<u>7.45</u>	<u>3237.3</u>	<u>0.14</u>	<u>9.75</u>	<u>-95.3</u>	<u>CLEAR</u>
	<u>SAMPLE</u>	<u>14:25</u>	<u>- SAMPLED WELL, ALL P's STABLE</u>									
			<u>7500 ml or 2 gallons</u>									
			<u>AFH 10/27/22</u>									

### NOTES (continued)

SAMPLE ID MW-393 AT 14:25

### ABBREVIATIONS

Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius
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## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN FP Client: BALDWIN VISTRA  
 Project Number: 1940102653 Task #: 1000-LBR Start Date: 10/27/2022 Time: 15:30  
 Field Personnel: AFH, SUM Finish Date: 10/27/2022 Time: 16:20

### WELL INFORMATION

Well ID: MW-158R  
 Casing ID: 2 Inches  
 Screen Interval: ~ 8-18 bgs  
 Borehole Diameter: 6 Inches  
 Filter Pack Interval: ~ 6-18 bgs

### EVENT TYPE

- Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: Alexis Fenstahl # 24343  
 Tube/Pump Intake Depth: 18.5' BTCL  
 Stabilized Pumping Rate: 100 ml/min

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTCL	Time (24-Hour)	Depth FT BTCL	Time (24-Hour)
LNAPL	<u>N/A</u>			
Groundwater	<u>13.40</u>	<u>15:30</u>	<u>17.35</u>	<u>16:20</u>
DNAPL	<u>N/A</u>			
Casing Base	<u>20.59</u>	<u>15:30</u>	<u>20.59</u>	<u>16:20</u>

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: \_\_\_\_\_  
 Standing Water Column: N/A feet  
 1 Well Volume: \_\_\_\_\_ Gallons    3 Well Volumes: \_\_\_\_\_ Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons    10 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Produced: \_\_\_\_\_ Gallons  
 Well Purged Dry?  Yes  No

Water Level Serial #: 363824 SQM/S Water Quality Probe Type and Serial #: ATC60 454650

### WATER QUALITY INDICATOR PARAMETERS

elapsed time (min)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>15:30</u>	—	<u>13.40</u>	—	<u>16.66</u>	<u>7.42</u>	<u>850.58</u>	<u>3.91</u>	<u>12.85</u>	<u>95.1</u>	<u>Clear</u>
purge	<u>15:38</u>		<u>14.07</u>	<u>0.67</u>	<u>17.82</u>	<u>7.19</u>	<u>858.61</u>	<u>1.44</u>	<u>7.57</u>	<u>94.4</u>	
	<u>15:42</u>		<u>14.25</u>	<u>0.18</u>							
	<u>15:44</u>		<u>14.46</u>	<u>0.46</u>							
	<u>15:47</u>		<u>14.65</u>	<u>0.19</u>							
↓ (STABLE)	<u>15:50</u>	<u>0.5</u>	<u>14.85</u>	<u>0.20</u>	<u>17.55</u>	<u>7.16</u>	<u>859.23</u>	<u>1.66</u>	<u>2.26</u>	<u>97.5</u>	
SAMPLE	<u>15:52</u>	<u>- SAMPLED WELL ALL PARAM'S STABLE</u>									

SAMPLE ID: MW-158R AT 15:52  
AFH 10/27/22

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: \_\_\_\_\_ Client: \_\_\_\_\_  
Project Number: \_\_\_\_\_ Task #: \_\_\_\_\_ Start Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Field Personnel: \_\_\_\_\_ Finish Date: \_\_\_\_\_ Time: \_\_\_\_\_

### WELL INFORMATION

Well ID: \_\_\_\_\_  
Casing ID: \_\_\_\_\_ inches

### EVENT TYPE

- Well Development       Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling       Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity

### NOTES (continued)

*Intent correct*  
*Blank*  
*- See front page.*

### ABBREVIATIONS

- |                                    |                                       |
|------------------------------------|---------------------------------------|
| Cond. - Actual Conductivity        | ORP - Oxidation-Reduction Potential   |
| FT BTOC - Feet Below Top of Casing | SEC - Specific Electrical Conductance |
| na - Not Applicable                | SU - Standard Units                   |
| nm - Not Measured                  | Temp - Temperature                    |
|                                    | °C - Degrees Celsius                  |

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/27/22 Time: 16:33  
 Field Personnel: AFT, SVM Finish Date: \_\_\_\_\_ Time: 18:56

### WELL INFORMATION

Well ID: MW-258  
 Casing ID: 2 Inches  
 Screen Interval: 40-50' bgs  
 Borehole Diameter: 6 Inches  
 Filter Pack Interval: bgs 38-49.52

### EVENT TYPE

- Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: Alexis Peristaltic # 24343  
 Tube/Pump Intake Depth: 47' BTOC  
 Stabilized Pumping Rate: 90 ml/min

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)
LNAPL	<u>N/A</u>			
Groundwater	<u>14.05</u>	<u>16:33</u>	<u>30.30</u>	<u>18:56</u>
DNAPL	<u>N/A</u>			
Casing Base	<u>53.0</u>	<u>16:33</u>	<u>53.0</u>	<u>18:56</u>

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: N/A  
 Standing Water Column: \_\_\_\_\_ feet  
 1 Well Volume: \_\_\_\_\_ Gallons    3 Well Volumes: \_\_\_\_\_ Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons    10 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Produced: \_\_\_\_\_ Gallons  
 Well Purged Dry?  Yes  No

Water Level Serial #: SOLINST 504176 Water Quality Probe Type and Serial #: AT100 S/N: 454650

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>16:37</u>	<u>→</u>	<u>14.05</u>	<u>—</u>	<u>16.46</u>	<u>8.44</u>	<u>1394.5</u>	<u>4.7</u>	<u>4972.9</u>	<u>102.3</u>	<u>Slightly Cloudy</u>
purge	<u>16:43</u>		<u>15.41</u>	<u>1.36</u>	<u>16.44</u>	<u>8.67</u>	<u>1423.1</u>	<u>0.31</u>	<u>3073.0</u>	<u>83.8</u>	<u>Slightly Cloudy</u>
	<u>16:46</u>		<u>15.74</u>	<u>0.33</u>							
	<u>16:49</u>		<u>15.18</u>	<u>0.44</u>							
	<u>16:52</u>		<u>16.58</u>	<u>0.40</u>							
	<u>16:55</u>		<u>16.96</u>	<u>0.38</u>							
	<u>16:58</u>		<u>17.31</u>	<u>0.35</u>							<u>Clear</u>
	<u>17:01</u>		<u>17.65</u>	<u>0.34</u>							<u>Clear</u>

DATA IN VA-SITE

SAMPLE ID: MW-258 AT 1810Z.  
- PLUS DUP-02 AT 18:30

Final WL = 30.30

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 194010263 Task #: 1000.LBR Start Date: 10/27/22 Time: 16:33  
 Field Personnel: AH, SW Finish Date: 10/27/22 Time: 18:56

### WELL INFORMATION

Well ID: MW-25B  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

el. time (min)	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
27	Purge	17:04		18.01	0.36							
30		17:07		18.35	0.34							
33		17:10		18.70	0.35							
36		17:13		19.03	0.33							
60		17:37		21.86								
63		17:40		22.12	0.26							
66		17:43		22.43	0.31							
69		17:46		22.73	0.30							
72		17:49		23.02	0.29							
75		17:52		23.31	0.29							
78		17:55		23.70	0.39	15.58	8.65	1373.7	0.20	335.19	30.8	
81		17:58		24.03	0.33	15.54	8.65	1372.7	0.20	334.53	28.6	
84	↓ (STADIA) SAMPLE	18:01	2.1 gal	24.36	0.33	15.41	8.66	1373.5	0.12	335.81	26.4	
		18:02	SAMPLED WELL									

### NOTES (continued)

@ SAMPLE ID: MW - 25B AT 18:02  
 + DUP - 02 AT 18:30  
 - all parameters stable except:  
 - temp (due to cold ambient conditions)

### ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.UBR Start Date: 10/27/22 Time: 17:00  
 Field Personnel: AFH, SVM Finish Date: \_\_\_\_\_ Time: 18:25

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-358</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>80-90' bgs</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>OLD SAMPLED BLADDER PUMP w/</u>
Borehole Diameter: <u>6</u> Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>~90' BTDL</u>
Filter Pack Interval: <u>78-90' s/s</u>		Stabilized Pumping Rate: <u>50 ml/min</u>

MP-50 controller

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION				
	INITIAL		FINAL					
	Depth FT BTDC	Time (24-Hour)	Depth FT BTDC	Time (24-Hour)				
LNAPL	<u>N/A</u>	<u></u>	<u></u>	<u></u>	Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole			
Groundwater	<u>82.97</u>	<u>17:10</u>	<u>85.48</u>	<u>18:25</u>	Volume Per Foot: _____			
DNAPL	<u>N/A</u>	<u></u>	<u></u>	<u></u>	Standing Water Column: <u>N/A</u> feet			
Casing Base	<u>93.1</u>	<u>17:10</u>	<u>93.1</u>	<u>18:25</u>	1 Well Volume: _____ Gallons	3 Well Volumes: _____ Gallons		
					5 Well Volumes: _____ Gallons	10 Well Volumes: _____ Gallons		
					Total Volumes Produced: _____ Gallons			
					Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No			

Water Level Serial #: SDINST # 363824 Water Quality Probe Type and Serial #: AT600 # 454660

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	17:17	—	82.97	—	16.63	8.44	2565.7	7.32	919.28	-60.3	Slightly cloudy
purge	17:23		83.3	0.33	15.85	8.15	3243.7	2.16	420.51	-140.5	
	17:26		83.30	0.04							
	17:29		83.35	0.05							
	17:32	1730		83.41	0.06						
	17:35	1733		83.61	0.20						
	17:38	730		83.77	0.16						
	17:41	1739		83.95	0.18						

elapsed time  
 0  
6  
9  
12  
13 15  
16 18  
19 21  
22 24

☑ SAMPLED: MW-358 AT 18:05

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/27/22 Time: 17:00  
 Field Personnel: APH, SVM Finish Date: \_\_\_\_\_ Time: 18:25

### WELL INFORMATION

Well ID: MW-35B  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

el. time	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
25:27	Purge	17:47	1742	84.05								Slightly cloudy
28:30		17:47	1745	84.20	0.15							
31:33		17:48		84.26	0.06		DATA					
34:36		17:51		84.42	0.16							
37		17:54		84.46	0.04							
40		17:57		84.64	0.18							
43		18:00		84.66	0.02							
46	18:07		0.75	84.75	0.09	14.46	7.93	3454.0	0.73	253.69	-166.9	
	SAMPLE 10: MW-35B AT 18:07.5. (SAMPLED WELL, ALL PARAMETERS STABLE EXCEPT TEMP)											

### NOTES (continued)

SAMPLE 10: MW-35B AT 18:07.5.

- COULDN'T GET TEMP TO STABILIZE - LIKELY A RESULT OF TEMP DROPPING (AMBIENT); SAMPLE COLLECTED AFTER SUNSET.

### ABBREVIATIONS

Cond. - Actual Conductivity FT BTOP - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius
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## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 1940102653 Task #: 1000-LBR Start Date: 10/20/22 Time: 0940  
 Field Personnel: AFL, S. K. [initials] Finish Date: \_\_\_\_\_ Time: 11:53

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
(Shedup) Well ID: <u>KPW04</u> Casing ID: <u>2</u> Inches Screen Interval: <u>~8-18' BGS</u> Borehole Diameter: <u>6</u> Inches Filter Pack Interval: _____	<input type="checkbox"/> Well Development <input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling <input type="checkbox"/> Well Volume Approach Sampling <input type="checkbox"/> Other (Specify below)	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump Bailer Type: <u>n/a</u> Pump Type and Serial #: <u>Penstak h/c</u> Tube/Pump Intake Depth: <u>~16' BTDL</u> Stabilized Pumping Rate: <u>130 ml/min</u>

DEPTH MEASUREMENTS					VOLUME CALCULATION AND PRODUCTION INFORMATION				
	INITIAL		FINAL						
	Depth FT BTDC	Time (24-Hour)	Depth FT BTDC	Time (24-Hour)	Volume Calculation Type: <input type="checkbox"/> Well Casing <input checked="" type="checkbox"/> Borehole				
LNAPL	<u>N/A</u>				Volume Per Foot: _____				
Groundwater	<u>7.89</u>	<u>09:40</u>	<u>7.89</u>	<u>11:53</u>	Standing Water Column: <u>N/A</u> feet				
DNAPL	<u>N/A</u>				1 Well Volume: _____ Gallons 3 Well Volumes: _____ Gallons				
Casing Base	<u>21.17</u>	<u>09:40</u>	<u>21.17</u>	<u>11:53</u>	5 Well Volumes: _____ Gallons 10 Well Volumes: _____ Gallons				
					Total Volumes Produced: _____ Gallons				
					Well Purged Dry? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				

Water Level Serial #: SOLINST S/N: 363824 Water Quality Probe Type and Serial #: ATI600 S/N: 454650

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Initial	<u>09:47</u>	—	<u>7.89</u>	—	<u>16.33</u>	<u>7.70</u>	<u>921.53</u>	<u>4.13</u>	<u>242.98</u>	<u>174.9</u>	<u>Clear</u>
purge	<u>09:53</u>		<u>7.89</u>	<u>0.0</u>	<u>17.90</u>	<u>8.28</u>	<u>893.93</u>	<u>0.27</u>	<u>79.54</u>	<u>78.0</u>	
	<u>09:56</u>		<u>7.89</u>	<u>0.0</u>							
	<u>09:58</u>		<u>7.89</u>	<u>0.0</u>							
	<u>10:01</u>		<u>7.89</u>	<u>0.0</u>							
	<u>10:04</u>		<u>7.89</u>	<u>0.0</u>							
	<u>10:07</u>		<u>7.89</u>	<u>0.0</u>							
	<u>10:10</u>		<u>7.89</u>	<u>0.0</u>							

**☑ SAMPLE ID: KPW04 AT 10:41 (MS/MSD)**  
 plus DUP-03 at 10:55

el. time  
 0:00  
 0:60  
 9:00  
 11:45  
 14:15  
 17:15  
 20:15  
 23:15

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000-LBR Start Date: 10/20/22 Time: 09:40  
 Field Personnel: AFH, SM Finish Date: 10/20/22 Time: 11:53

### WELL INFORMATION

Well ID: KPW04  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

elapsed time

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity	
Purge	1013		7.89	0.00							Clear	
	1016											
	1019											
	1022											
	1025											
	1028											
	1031											
	1034								0.00			
	1037								0.00			
(STABLE)	1040	1.8 gal	7.89		19.19	8.31	885.84	0.05	0.00	125.7	Clear	
SAMPLE	1041	SAMPLED WELL, ALL PARAMETERS STABLE										
<del>DATA 10/20/22</del>												

### NOTES (continued)

@ SAMPLE ID: KPW-04 AT 10:41 (MS/MSD)  
 & DWP-03 at 10:55

### ABBREVIATIONS

Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius
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## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000-LBR Start Date: 10/28/22 Time: 1203  
 Field Personnel: AFT Finish Date: \_\_\_\_\_ Time: 13:430

### WELL INFORMATION

(Shickup) Well ID: TPZ-164  
 Casing ID: 2 Inches  
 Screen Interval: ~ 4.5-9.5' BGS  
 Borehole Diameter: ? Inches  
 Filter Pack Interval: ?

### EVENT TYPE

- Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailor  Pump  
 Bailor Type: n/a  
 Pump Type and Serial #: Peristaltic  
 Tube/Pump Intake Depth: ~ 8' BTOL  
 Stabilized Pumping Rate: 110 ml/min

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOL	Time (24-Hour)	Depth FT BTOL	Time (24-Hour)
LNAPL	<u>N/A</u>			
Groundwater	<u>3.93</u>	<u>12:03</u>	<u>3.93</u>	<u>13:30</u>
DNAPL	<u>N/A</u>			
Casing Base	<u>9.76</u>	<u>12:03</u>	<u>9.76</u>	<u>13:30</u>

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: \_\_\_\_\_  
 Standing Water Column: \_\_\_\_\_ feet  
 1 Well Volume: \_\_\_\_\_ Gallons 3 Well Volumes: \_\_\_\_\_ Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons 10 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Produced: \_\_\_\_\_ Gallons  
 Well Purged Dry?  Yes  No

Water Level Serial #: SOINT 363824 Water Quality Probe Type and Serial #: ATT600 SN: 454650

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>12:08</u>	<u>—</u>	<u>3.93</u>	<u>0.00</u>	<u>18.46</u>	<u>7.35</u>	<u>1,013.1</u>	<u>1.19</u>	<u>260.37</u>	<u>9.6</u>	<u>Cloudy</u>
purge	<u>12:14</u>		<u>3.93</u>		<u>17.59</u>	<u>7.27</u>	<u>1,020.8</u>	<u>0.54</u>	<u>217.11</u>	<u>-65.5</u>	<u>Cloudy</u>
	<u>12:17</u>		<u>3.93</u>								
	<u>12:20</u>		<u>3.93</u>								
	<u>12:23</u>		<u>3.93</u>								
	<u>12:26</u>		<u>3.93</u>								
	<u>12:29</u>		<u>3.93</u>								
	<u>12:32</u>		<u>3.93</u>								

elapsed time  
 00:00  
 06:00  
 09:00  
 12:00  
 15:00  
 18:00  
 21:00  
 24:00

w/ orange plates

DATA IN VA - SITE

### NOTES

SAMPLE ID: TPZ-164 AT 13:06.  
 No - dedicated pump in well

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 10/28/2022 Time: 12:03  
 Field Personnel: AFT Finish Date: 10/28/2022 Time: 13:30

### WELL INFORMATION

Well ID: TPZ-164  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

Elapsed Time	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<u>27:00</u>	<u>Purge</u>	<u>12:35</u>		<u>3.93</u>	<u>0.00</u>							<u>slightly cloudy</u>
<u>30:00</u>		<u>12:38</u>		<u>3.93</u>	<u>0.00</u>							
<u>33:00</u>		<u>12:41</u>		<u>3.93</u>	<u>0.00</u>							
<u>36:00</u>		<u>12:44</u>		<u>3.93</u>	<u>0.00</u>							
<u>39:00</u>		<u>12:47</u>		<u>3.93</u>	<u>0.00</u>							
<u>42:00</u>		<u>12:50</u>			<u>0.00</u>							
<u>45:00</u>		<u>12:53</u>			<u>0.00</u>							
<u>48:00</u>		<u>12:56</u>			<u>0.00</u>							
<u>51:00</u>		<u>12:59</u>			<u>0.00</u>	<u>17.95</u>	<u>7.31</u>	<u>1028.6</u>	<u>0.08</u>	<u>12.51</u>	<u>-106.5</u>	<u>Clear</u>
<u>54:00</u>		<u>13:02</u>			<u>0.00</u>	<u>17.96</u>	<u>7.32</u>	<u>1028.3</u>	<u>0.07</u>	<u>10.74</u>	<u>-107.8</u>	<u>Clear</u>
<u>57:00</u>	<u>(STABLE)</u>	<u>13:05</u>	<u>1.75 gal</u>	<u>3.93</u>	<u>0.00</u>	<u>17.85</u>	<u>7.31</u>	<u>1,026.9</u>	<u>0.08</u>	<u>11.41</u>	<u>-107.9</u>	<u>Clear</u>
	<u>SAMPLE</u>	<u>1306</u>	<u>-</u>	<u>SAMPLED WELL</u>								

flakes stopped coming into cell

### NOTES (continued)

SAMPLE ID: TPZ-164 at 13:06.

### ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

## WELL LEVEL AND FIELD PARAMETERS FIELD FORM

Site : Baldwin - October  
 Project # : 1940102653  
 Task # : 1000-LBR  
 Date : 10/24/22 + 10/25/22  
 Samplers : ARH, SM

Water Level Indicator Serial # : SOLINST MODEL 101  
 Purge Device and Serial # : \_\_\_\_\_  
 Quality Probe Type and Serial # : AquaTroll 600  
 Calibration Check : \_\_\_\_\_  
N/A

Location	Time (military)	Depth to Water (feet below TOC)	Product Top Depth (feet below TOC)	Product Bottom Depth (feet below TOC)	Product Notes	Time (military)	pH (su)	Conductivity (µs/cm)	Temperature (°C)	Oxidation/Reduction Potential (ORP) (mV)	Turbidity (NTU)	Dissolved Oxygen (DO) (mg/L)	Field Comments:
TPZ-159	08:21	NM	N/A	N/A	N/A								Couldnt measure OBST. AT 3.8' in casing
XPW01	0828	11.51											
XPW06	0840	2.54											
PZ-169	0846	15.05											
MW-369	0848	14.48											
MW-370	0853	19.13											
PZ-170	08:56	17.22											
MW-382	0900	17.18											
PZ-182	0903	19.92											
OW-257	09:06	7.70											
OW-157	09:10	9.05											
MW-390	09:24	9.25											
MW-384	0933	14.61											
MW-383	0937	21.42											

10/25  
 ↑  
 ↓

10/25/22  
 ARH

n/a : Not Applicable      nm : Not Measured      TOC: Top of Well Casing



## WELL LEVEL AND FIELD PARAMETERS FIELD FORM

Site : BALDWIN - October 2022 GW Sampling  
 Project # : 1940102653  
 Task # : 1000.LBR  
 Date : 10/24 + 10/25/2022  
 Samplers : AFH, SM

Water Level Indicator Serial # : SOLINST MODEL 101  
 Purge Device and Serial # : \_\_\_\_\_  
 Quality Probe Type and Serial # : AquaTroll 600  
 Calibration Check : \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

↑ 10/24  
 ↓ 10/25  
 ↓

Location	Time (military)	Depth to Water (feet below TOC)	Product Top Depth (feet below TOC)	Product Bottom Depth (feet below TOC)	Product Notes	Time (military)	pH (su)	Conductivity (µs/cm)	Temperature (°C)	Oxidation/Reduction Potential (ORP) (mV)	Turbidity (NTU)	Dissolved Oxygen (DO) (mg/L)	Field Comments:
MW-392	14:10	9.34	N/A	N/A	N/A								
MW-192	14:12	8.53											
MW-193	14:28	9.11											
MW-393	14:30	10.80											
MW-394	14:38	6.77											
MW-194	14:36	7.77											
MW-258	14:58	14.38											
MW-158R	14:53	13.50											
MW-358	14:54	84.25											
MW-306	15:06	18.10											
XPW05	07:55	4.89											
XPW02	0804	5.03											
XPW04	0812	7.83											
TPZ-164	0816	3.95											

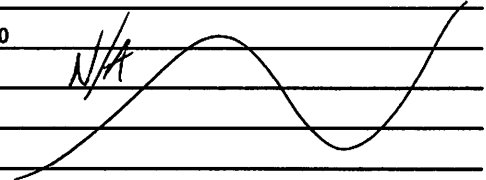
n/a : Not Applicable      nm : Not Measured      TOC : Top of Well Casing



# WELL LEVEL AND FIELD PARAMETERS FIELD FORM

Site : BALDWIN - Oct. '22 GW SAMPLING  
 Project # : 1940102653  
 Task # : 1000.LBR  
 Date : 10/24 + 10/25/22  
 Samplers : AFH, SM

Water Level Indicator Serial # : SOLINST MODEL 101  
 Purge Device and Serial # : \_\_\_\_\_  
 Quality Probe Type and Serial # : AquaTroll 600  
 Calibration Check : N/A



10/25  
 ↑  
 ↓

Location	Time (military)	Depth to Water (feet below TOC)	Product Top Depth (feet below TOC)	Product Bottom Depth (feet below TOC)	Product Notes	Time (military)	pH (su)	Conductivity (µs/cm)	Temperature (°C)	Oxidation/Reduction Potential (ORP) (mV)	Turbidity (NTU)	Dissolved Oxygen (DO) (mg/L)	Field Comments:
CW-256	09:52	12.65	N/A	N/A	N/A								
OW-156	09:54	9.72											
MW-356	09:56	4.57											
MW-204	10:46	13.68											
MW-203	10:51	10.93											
MW-305	10:59	10.36											
MW-307	11:06	7.76											
MW-304	11:36	10.40											
MW-104DR	11:38	14.57											
MW-104SR	11:40	14.72											

n/a : Not Applicable      nm : Not Measured      TOC: Top of Well Casing



# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454650  
Created 10/25/2022

## Sensor Conductivity

Serial Number 751129  
Last Calibrated 10/25/2022

### Calibration Details

TDS Conversion Factor (ppm) 0.65  
Cell Constant 0.975  
Reference Temperature 25.00 °C

### Pre Measurement

Actual Conductivity 7,188.6  $\mu\text{S}/\text{cm}$   
Specific Conductivity 7,710.8  $\mu\text{S}/\text{cm}$

### Post Measurement

Actual Conductivity 7,458.2  $\mu\text{S}/\text{cm}$   
Specific Conductivity 8,000.0  $\mu\text{S}/\text{cm}$

## Sensor pH/ORP

Serial Number 687010  
Last Calibrated 10/25/2022

### Calibration Details

#### Calibration Point 1

pH of Buffer 7.00 pH  
pH mV -24.6 mV  
Temperature 21.45 °C

#### Pre Measurement

pH 7.03 pH  
pH mV -24.6 mV

#### Post Measurement

pH 7.00 pH  
pH mV -24.3 mV

#### Slope and Offset 1

Slope -58.46 mV/pH  
Offset -24.6 mV

#### ORP

ORP Solution Quick-Cal  
Offset 53.3 mV



Temperature	21.45 °C
Pre Measurement	222.3 mV
Post Measurement	228.9 mV

Sensor	Turbidity
--------	-----------

Serial Number	787938
Last Calibrated	10/18/2022

*Calibration Details*

---

TSS Conversion Factor (mg/L)	0
Slope	0.9618394
Offset	-2.27 NTU

*Calibration Point 1*

---

Pre Measurement	0.50 NTU
Post Measurement	0.00 NTU

*Calibration Point 2*

---

Pre Measurement	152.84 NTU
Post Measurement	124.00 NTU

Sensor	RDO
--------	-----

Serial Number	522618
Last Calibrated	10/18/2022

*Calibration Details*

---

Slope	1.072568
Offset	0.00 mg/L

*Calibration point 100%*

---

Concentration	8.30 mg/L
Pre Measurement	97.33 %Sat
Post Measurement	100.00 %Sat
Temperature	19.94 °C
Barometric Pressure	991.63 mbar

Sensor	Barometric Pressure
--------	---------------------

Serial Number	454650
Last Calibrated	10/18/2022

*Calibration Details*

---

Offset	0.54 mm Hg
Pre Measurement	14.39 psi
Post Measurement	14.39 psi

Sensor	Pressure
--------	----------

Serial Number	454205
Last Calibrated	10/18/2022

*Calibration Details*

---

Zero Offset	0.00 psi
Reference Depth	0.00 ft
Reference Offset	0.00 psi
Pre Measurement	0.00 psi
Post Measurement	0.00 psi

# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454650  
Created 10/27/2022

## Sensor Conductivity

Serial Number 751129  
Last Calibrated 10/27/2022

### Calibration Details

TDS Conversion Factor (ppm) 0.65  
Cell Constant 1.07  
Reference Temperature 25.00 °C

### Pre Measurement

Actual Conductivity 5,568.3  $\mu\text{S}/\text{cm}$   
Specific Conductivity 7,277.0  $\mu\text{S}/\text{cm}$

### Post Measurement

Actual Conductivity 6,121.5  $\mu\text{S}/\text{cm}$   
Specific Conductivity 8,000.0  $\mu\text{S}/\text{cm}$

## Sensor pH/ORP

Serial Number 687010  
Last Calibrated 10/27/2022

### Calibration Details

#### Calibration Point 1

pH of Buffer 7.03 pH  
pH mV -28.5 mV  
Temperature 12.71 °C

#### Pre Measurement

pH 7.08 pH  
pH mV -28.5 mV

#### Post Measurement

pH 7.03 pH  
pH mV -27.3 mV

#### Slope and Offset 1

Slope -56.72 mV/pH  
Offset -26.8 mV

#### ORP

ORP Solution Quick-Cal  
Offset 53.2 mV

Temperature	12.71 °C
Pre Measurement	242.1 mV
Post Measurement	242.1 mV

Sensor	Turbidity
--------	-----------

Serial Number	787938
Last Calibrated	10/18/2022

*Calibration Details*

---

TSS Conversion Factor (mg/L)	0
Slope	0.9618394
Offset	-2.27 NTU

*Calibration Point 1*

---

Pre Measurement	0.50 NTU
Post Measurement	0.00 NTU

*Calibration Point 2*

---

Pre Measurement	152.84 NTU
Post Measurement	124.00 NTU

Sensor	RDO
--------	-----

Serial Number	522618
Last Calibrated	10/18/2022

*Calibration Details*

---

Slope	1.072568
Offset	0.00 mg/L

*Calibration point 100%*

---

Concentration	8.30 mg/L
Pre Measurement	97.33 %Sat
Post Measurement	100.00 %Sat
Temperature	19.94 °C
Barometric Pressure	991.63 mbar

Sensor	Barometric Pressure
--------	---------------------

Serial Number	454650
Last Calibrated	10/18/2022

*Calibration Details*

---

Offset	0.54 mm Hg
Pre Measurement	14.39 psi
Post Measurement	14.39 psi

Sensor	Pressure
--------	----------

Serial Number	454205
Last Calibrated	10/18/2022

*Calibration Details*

---

Zero Offset	0.00 psi
Reference Depth	0.00 ft
Reference Offset	0.00 psi
Pre Measurement	0.00 psi
Post Measurement	0.00 psi

# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454650  
Created 10/28/2022

## Sensor Conductivity

Serial Number 751129  
Last Calibrated 10/28/2022

### Calibration Details

TDS Conversion Factor (ppm) 0.65  
Cell Constant 1.163  
Reference Temperature 25.00 °C

### Pre Measurement

Actual Conductivity 5,699.6  $\mu\text{S}/\text{cm}$   
Specific Conductivity 7,360.4  $\mu\text{S}/\text{cm}$

### Post Measurement

Actual Conductivity 6,194.9  $\mu\text{S}/\text{cm}$   
Specific Conductivity 8,000.0  $\mu\text{S}/\text{cm}$

## Sensor pH/ORP

Serial Number 687010  
Last Calibrated 10/28/2022

### Calibration Details

#### Calibration Point 1

pH of Buffer 7.03 pH  
pH mV -27.9 mV  
Temperature 13.19 °C

#### Pre Measurement

pH 7.02 pH  
pH mV -28.0 mV

#### Post Measurement

pH 7.03 pH  
pH mV -26.8 mV

#### Slope and Offset 1

Slope -56.82 mV/pH  
Offset -26.2 mV

#### ORP

ORP Solution Quick-Cal  
Offset 50.5 mV

Temperature	13.19 °C
Pre Measurement	243.9 mV
Post Measurement	241.3 mV

Sensor	Turbidity
--------	-----------

Serial Number	787938
Last Calibrated	10/28/2022

*Calibration Details*

---

TSS Conversion Factor (mg/L)	0
Slope	1
Offset	-8.70 NTU

*Calibration Point 1*

---

Pre Measurement	10.43 NTU
Post Measurement	10.00 NTU

Sensor	RDO
--------	-----

Serial Number	522618
Last Calibrated	10/18/2022

*Calibration Details*

---

Slope	1.072568
Offset	0.00 mg/L

*Calibration point 100%*

---

Concentration	8.30 mg/L
Pre Measurement	97.33 %Sat
Post Measurement	100.00 %Sat
Temperature	19.94 °C
Barometric Pressure	991.63 mbar

Sensor	Barometric Pressure
--------	---------------------

Serial Number	454650
Last Calibrated	10/18/2022

*Calibration Details*

---

Offset	0.54 mm Hg
Pre Measurement	14.39 psi
Post Measurement	14.39 psi

Sensor	Pressure
--------	----------

Serial Number	454205
Last Calibrated	10/18/2022

*Calibration Details*

---

Zero Offset	0.00 psi
Reference Depth	0.00 ft
Reference Offset	0.00 psi

Pre Measurement 0.00 psi

Post Measurement 0.00 psi



# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454660  
Created 10/25/2022

## Sensor Conductivity

Serial Number 751118  
Last Calibrated 10/25/2022

### Calibration Details

TDS Conversion Factor (ppm) 0.65  
Cell Constant 0.922  
Reference Temperature 25.00 °C

### Pre Measurement

Actual Conductivity 7,200.1  $\mu\text{S}/\text{cm}$   
Specific Conductivity 7,649.1  $\mu\text{S}/\text{cm}$

### Post Measurement

Actual Conductivity 7,530.4  $\mu\text{S}/\text{cm}$   
Specific Conductivity 8,000.0  $\mu\text{S}/\text{cm}$

## Sensor pH/ORP

Serial Number 612312  
Last Calibrated 10/25/2022

### Calibration Details

#### Calibration Point 1

pH of Buffer 7.00 pH  
pH mV -6.0 mV  
Temperature 21.93 °C

#### Pre Measurement

pH 7.06 pH  
pH mV -6.3 mV

#### Post Measurement

pH 7.00 pH  
pH mV -6.0 mV

#### Slope and Offset 1

Slope -58.55 mV/pH  
Offset -6.0 mV

#### ORP

ORP Solution Quick-Cal  
Offset 33.5 mV

Temperature	21.93 °C
Pre Measurement	226.8 mV
Post Measurement	228.2 mV

---

**Sensor                      Turbidity**

Serial Number	837871
Last Calibrated	10/18/2022

---

*Calibration Details*

Slope	1.178338
Offset	-1.11 NTU

---

*Calibration Point 1*

Pre Measurement	1.43 NTU
Post Measurement	0.00 NTU

---

*Calibration Point 2*

Pre Measurement	137.34 NTU
Post Measurement	124.00 NTU

---

**Sensor                      RDO**

Serial Number	924481
Last Calibrated	10/18/2022

---

*Calibration Details*

Slope	1.053046
Offset	0.00 mg/L

---

*Calibration point 100%*

Concentration	8.38 mg/L
Pre Measurement	99.58 %Sat
Post Measurement	100.00 %Sat
Temperature	20.36 °C
Barometric Pressure	991.41 mbar

---

**Sensor                      Barometric Pressure**

Serial Number	454660
Last Calibrated	10/18/2022

---

*Calibration Details*

Offset	-0.03 mm Hg
Pre Measurement	14.38 psi
Post Measurement	14.38 psi

---

**Sensor                      Pressure**

Serial Number	454203
Last Calibrated	10/18/2022

---

*Calibration Details*

Zero Offset	-0.01 psi
Reference Depth	0.00 ft
Reference Offset	0.00 psi
Pre Measurement	0.00 psi
Post Measurement	0.00 psi

# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454660  
Created 10/26/2022

## Sensor Conductivity

Serial Number 751118  
Last Calibrated 10/26/2022

### Calibration Details

TDS Conversion Factor (ppm) 0.65  
Cell Constant 0.953  
Reference Temperature 25.00 °C

### Pre Measurement

Actual Conductivity 5,436.3  $\mu\text{S/cm}$   
Specific Conductivity 7,743.4  $\mu\text{S/cm}$

### Post Measurement

Actual Conductivity 5,616.4  $\mu\text{S/cm}$   
Specific Conductivity 8,000.0  $\mu\text{S/cm}$

## Sensor pH/ORP

Serial Number 612312  
Last Calibrated 10/26/2022

### Calibration Details

#### Calibration Point 1

pH of Buffer 7.04 pH  
pH mV -6.5 mV  
Temperature 9.40 °C

#### Pre Measurement

pH 7.01 pH  
pH mV -6.4 mV

#### Post Measurement

pH 7.04 pH  
pH mV -6.2 mV

#### Slope and Offset 1

Slope -56.06 mV/pH  
Offset -4.3 mV

#### ORP

ORP Solution Quick-Cal  
Offset 34.4 mV

Temperature	9.40 °C
Pre Measurement	246.0 mV
Post Measurement	247.1 mV

---

**Sensor                      Turbidity**

Serial Number	837871
Last Calibrated	10/18/2022

---

*Calibration Details*

Slope	1.178338
Offset	-1.11 NTU

---

*Calibration Point 1*

Pre Measurement	1.43 NTU
Post Measurement	0.00 NTU

---

*Calibration Point 2*

Pre Measurement	137.34 NTU
Post Measurement	124.00 NTU

---

**Sensor                      RDO**

Serial Number	924481
Last Calibrated	10/18/2022

---

*Calibration Details*

Slope	1.053046
Offset	0.00 mg/L

---

*Calibration point 100%*

Concentration	8.38 mg/L
Pre Measurement	99.58 %Sat
Post Measurement	100.00 %Sat
Temperature	20.36 °C
Barometric Pressure	991.41 mbar

---

**Sensor                      Barometric Pressure**

Serial Number	454660
Last Calibrated	10/18/2022

---

*Calibration Details*

Offset	-0.03 mm Hg
Pre Measurement	14.38 psi
Post Measurement	14.38 psi

---

**Sensor                      Pressure**

Serial Number	454203
Last Calibrated	10/18/2022

---

*Calibration Details*

Zero Offset	-0.01 psi
Reference Depth	0.00 ft
Reference Offset	0.00 psi
Pre Measurement	0.00 psi
Post Measurement	0.00 psi

# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454660  
Created 10/27/2022

## Sensor Conductivity

Serial Number 751118  
Last Calibrated 10/27/2022

### Calibration Details

TDS Conversion Factor (ppm) 0.65  
Cell Constant 0.944  
Reference Temperature 25.00 °C

### Pre Measurement

Actual Conductivity 5,009.5  $\mu\text{S}/\text{cm}$   
Specific Conductivity 8,088.1  $\mu\text{S}/\text{cm}$

### Post Measurement

Actual Conductivity 4,955.0  $\mu\text{S}/\text{cm}$   
Specific Conductivity 8,000.0  $\mu\text{S}/\text{cm}$

## Sensor pH/ORP

Serial Number 612312  
Last Calibrated 10/27/2022

### Calibration Details

#### Calibration Point 1

pH of Buffer 7.04 pH  
pH mV -49.1 mV  
Temperature 5.07 °C

#### Pre Measurement

pH 7.82 pH  
pH mV -49.7 mV

#### Post Measurement

pH 7.04 pH  
pH mV -45.8 mV

#### Slope and Offset 1

Slope -55.21 mV/pH  
Offset -46.9 mV

#### ORP

ORP Solution Quick-Cal  
Offset 34.3 mV

Temperature	5.07 °C
Pre Measurement	253.5 mV
Post Measurement	253.6 mV

---

**Sensor                      Turbidity**

Serial Number	837871
Last Calibrated	10/18/2022

---

*Calibration Details*

Slope	1.178338
Offset	-1.11 NTU

---

*Calibration Point 1*

Pre Measurement	1.43 NTU
Post Measurement	0.00 NTU

---

*Calibration Point 2*

Pre Measurement	137.34 NTU
Post Measurement	124.00 NTU

---

**Sensor                      RDO**

Serial Number	924481
Last Calibrated	10/18/2022

---

*Calibration Details*

Slope	1.053046
Offset	0.00 mg/L

---

*Calibration point 100%*

Concentration	8.38 mg/L
Pre Measurement	99.58 %Sat
Post Measurement	100.00 %Sat
Temperature	20.36 °C
Barometric Pressure	991.41 mbar

---

**Sensor                      Barometric Pressure**

Serial Number	454660
Last Calibrated	10/18/2022

---

*Calibration Details*

Offset	-0.03 mm Hg
Pre Measurement	14.38 psi
Post Measurement	14.38 psi

---

**Sensor                      Pressure**

Serial Number	454203
Last Calibrated	10/18/2022

---

*Calibration Details*



Zero Offset	-0.01 psi
Reference Depth	0.00 ft
Reference Offset	0.00 psi
Pre Measurement	0.00 psi
Post Measurement	0.00 psi

December 30, 2022

Eric Bauer  
Ramboll  
300 S. Wacker Drive  
Suite 130  
Chicago, IL 60606  
TEL: (414) 837-3687  
FAX: (414) 837-3608



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

**RE:** Baldwin 845

**WorkOrder:** 22111134

Dear Eric Bauer:

TEKLAB, INC received 16 samples on 11/16/2022 9:20:00 PM for the analysis presented in the following report.

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

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

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

Sincerely,



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



## Report Contents

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

---

**Client:** Ramboll

**Work Order:** 22111134

**Client Project:** Baldwin 845

**Report Date:** 30-Dec-22

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**This reporting package includes the following:**

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Chain of Custody	Appended

**Client:** Ramboll

**Work Order:** 22111134

**Client Project:** Baldwin 845

**Report Date:** 30-Dec-22

### 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)

**Client:** Ramboll

**Work Order:** 22111134

**Client Project:** Baldwin 845

**Report Date:** 30-Dec-22

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### Qualifiers

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



## Case Narrative

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

**Client:** Ramboll

**Work Order:** 22111134

**Client Project:** Baldwin 845

**Report Date:** 30-Dec-22

**Cooler Receipt Temp:** 0.2 °C

Per Eric Bauer, report MW-203 as MW-116 and MW-305 as MW-126. (ehurley - 12/2/2022 12:10:31 PM)

Radium 226/228 analyses were performed by Pace Analytical National. See attached for QC report.

### Locations

#### Collinsville

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

#### Collinsville Air

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**Fax** (217) 698-1005  
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#### Chicago

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Downers Grove, IL 60515  
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**Email** arenner@teklabinc.com

#### Kansas City

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



## Accreditations

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

**Client:** Ramboll

**Work Order:** 22111134

**Client Project:** Baldwin 845

**Report Date:** 30-Dec-22

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



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111134-001  
 Matrix: GROUNDWATER

Work Order: 22111134  
 Report Date: 30-Dec-22  
 Client Sample ID: XPW06  
 Collection Date: 11/15/2022 9:29

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		372	mg/L	1	11/21/2022 12:18	R321424
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/21/2022 12:18	R321424
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		1120	mg/L	1	11/21/2022 11:54	R321574
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	200		475	mg/L	20	11/21/2022 23:30	R321457
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.61	mg/L	1	11/22/2022 16:06	R321523
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		18	mg/L	1	11/21/2022 10:05	R321468
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		164	mg/L	1	11/18/2022 9:25	200094
Lithium	NELAP	0.0050		< 0.0050	mg/L	1	11/18/2022 9:25	200094
Magnesium	NELAP	0.0500		44.6	mg/L	1	11/18/2022 9:25	200094
Potassium	NELAP	1.00		22.4	mg/L	10	11/18/2022 15:55	200094
Sodium	NELAP	0.0500		141	mg/L	1	11/18/2022 9:25	200094
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 15:41	200094
Arsenic	NELAP	0.0010		0.0020	mg/L	5	11/18/2022 17:14	200094
Barium	NELAP	0.0010		0.198	mg/L	5	11/18/2022 17:14	200094
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 15:41	200094
Boron	NELAP	0.0250		4.64	mg/L	5	11/22/2022 21:26	200094
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 17:14	200094
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/22/2022 21:26	200094
Cobalt	NELAP	0.0010	J	0.0007	mg/L	5	11/22/2022 21:26	200094
Iron	NELAP	0.0250		2.21	mg/L	5	11/18/2022 17:14	200094
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 17:14	200094
Manganese	NELAP	0.0020		1.16	mg/L	5	11/18/2022 17:14	200094
Molybdenum	NELAP	0.0015		0.150	mg/L	5	11/22/2022 21:26	200094
Selenium	NELAP	0.0010		0.0047	mg/L	5	11/21/2022 15:41	200094
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/18/2022 17:14	200094
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/18/2022 17:31	200209
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/13/2022 0:00	R323004





## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111134-002  
 Matrix: GROUNDWATER

Work Order: 22111134  
 Report Date: 30-Dec-22

Client Sample ID: XPW01

Collection Date: 11/15/2022 11:23

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		205	mg/L	1	11/21/2022 12:31	R321424
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	11/21/2022 12:31	R321424
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		410	mg/L	1	11/21/2022 11:54	R321574
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		105	mg/L	5	11/21/2022 23:48	R321457
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.50	mg/L	1	11/22/2022 16:07	R321523
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		22	mg/L	1	11/21/2022 10:16	R321468
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100	S	72.5	mg/L	1	11/18/2022 9:29	200094
Lithium	NELAP	0.0050		0.0127	mg/L	1	11/18/2022 9:29	200094
Magnesium	NELAP	0.0500		19.1	mg/L	1	11/18/2022 9:29	200094
Potassium	NELAP	0.500		10.5	mg/L	5	11/18/2022 15:58	200094
Sodium	NELAP	0.0500		34.1	mg/L	1	11/18/2022 9:29	200094
<i>Matrix spike control limits for Ca are not applicable due to high sample/spike ratio.</i>								
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 16:12	200094
Arsenic	NELAP	0.0010	J	0.0007	mg/L	5	11/18/2022 18:48	200094
Barium	NELAP	0.0010		0.108	mg/L	5	11/18/2022 18:48	200094
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 16:12	200094
Boron	NELAP	0.0250		1.03	mg/L	5	11/22/2022 21:31	200094
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:48	200094
Chromium	NELAP	0.0015	J	0.0013	mg/L	5	11/22/2022 21:31	200094
Cobalt	NELAP	0.0010	J	0.0002	mg/L	5	11/18/2022 18:48	200094
Iron	NELAP	0.0250		1.84	mg/L	5	11/22/2022 21:31	200094
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:48	200094
Manganese	NELAP	0.0020		0.106	mg/L	5	11/18/2022 18:48	200094
Molybdenum	NELAP	0.0015		0.0575	mg/L	5	11/22/2022 21:31	200094
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 16:12	200094
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/18/2022 18:48	200094
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/18/2022 17:34	200209
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/13/2022 0:00	R323004



# Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111134-003  
 Matrix: GROUNDWATER

Work Order: 22111134  
 Report Date: 30-Dec-22  
 Client Sample ID: XPW05  
 Collection Date: 11/15/2022 13:43

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		180	mg/L	1	11/21/2022 12:41	R321424
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	11/21/2022 12:41	R321424
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		450	mg/L	1	11/21/2022 11:55	R321574
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		132	mg/L	5	11/21/2022 10:43	R321457
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.58	mg/L	1	11/22/2022 16:12	R321523
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		46	mg/L	1	11/21/2022 10:37	R321468
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		43.5	mg/L	1	11/18/2022 9:40	200094
Lithium	NELAP	0.0050	J	0.0039	mg/L	1	11/18/2022 9:40	200094
Magnesium	NELAP	0.0500		17.8	mg/L	1	11/18/2022 9:40	200094
Potassium	NELAP	0.500		9.52	mg/L	5	11/22/2022 11:55	200094
Sodium	NELAP	0.0500		82.4	mg/L	1	11/18/2022 9:40	200094
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 15:47	200094
Arsenic	NELAP	0.0010		0.0014	mg/L	5	11/18/2022 18:04	200094
Barium	NELAP	0.0010		0.120	mg/L	5	11/18/2022 18:04	200094
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 15:47	200094
Boron	NELAP	0.0250		1.16	mg/L	5	11/22/2022 22:12	200094
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:04	200094
Chromium	NELAP	0.0015	J	0.0009	mg/L	5	11/22/2022 22:12	200094
Cobalt	NELAP	0.0010	J	0.0002	mg/L	5	11/18/2022 18:04	200094
Iron	NELAP	0.0250		1.46	mg/L	5	11/18/2022 18:04	200094
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:04	200094
Manganese	NELAP	0.0020		0.596	mg/L	5	11/18/2022 18:04	200094
Molybdenum	NELAP	0.0015		0.0169	mg/L	5	11/22/2022 22:12	200094
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 15:47	200094
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/18/2022 18:04	200094
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/18/2022 17:40	200209
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/13/2022 0:00	R323004



# Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111134-004  
 Matrix: GROUNDWATER

Work Order: 22111134  
 Report Date: 30-Dec-22

Client Sample ID: XPW02

Collection Date: 11/15/2022 15:33

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		426	mg/L	1	11/21/2022 12:48	R321424
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	11/21/2022 12:48	R321424
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		485	mg/L	2.5	11/21/2022 11:55	R321574
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		20	mg/L	1	11/21/2022 11:01	R321457
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.55	mg/L	1	11/22/2022 16:14	R321523
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		30	mg/L	1	11/21/2022 11:01	R321468
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		115	mg/L	1	11/18/2022 12:12	200094
Lithium	NELAP	0.0050		0.0194	mg/L	1	11/18/2022 12:12	200094
Magnesium	NELAP	0.0500		25.3	mg/L	1	11/18/2022 12:12	200094
Potassium	NELAP	0.500		11.2	mg/L	5	11/18/2022 16:10	200094
Sodium	NELAP	0.0500		46.4	mg/L	1	11/18/2022 12:12	200094
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 15:53	200094
Arsenic	NELAP	0.0010		0.0026	mg/L	5	11/18/2022 18:10	200094
Barium	NELAP	0.0010		0.194	mg/L	5	11/18/2022 18:10	200094
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 15:53	200094
Boron	NELAP	0.0250		1.20	mg/L	5	11/22/2022 22:17	200094
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:10	200094
Chromium	NELAP	0.0015	J	0.0010	mg/L	5	11/22/2022 22:17	200094
Cobalt	NELAP	0.0010	J	0.0002	mg/L	5	11/18/2022 18:10	200094
Iron	NELAP	0.0250		7.92	mg/L	5	11/18/2022 18:10	200094
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:10	200094
Manganese	NELAP	0.0020		1.81	mg/L	5	11/18/2022 18:10	200094
Molybdenum	NELAP	0.0015		0.0350	mg/L	5	11/22/2022 22:17	200094
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 15:53	200094
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/18/2022 18:10	200094
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/18/2022 17:43	200209
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/13/2022 0:00	R323004



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111134-005  
 Matrix: GROUNDWATER

Work Order: 22111134  
 Report Date: 30-Dec-22

Client Sample ID: DUP-01

Collection Date: 11/15/2022 15:43

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		413	mg/L	1	11/21/2022 12:55	R321424
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/21/2022 12:55	R321424
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		515	mg/L	2.5	11/21/2022 11:55	R321574
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		19	mg/L	1	11/21/2022 11:09	R321457
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.54	mg/L	1	11/22/2022 16:20	R321523
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		30	mg/L	1	11/21/2022 11:09	R321468
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		114	mg/L	1	11/18/2022 12:16	200094
Lithium	NELAP	0.0050		0.0187	mg/L	1	11/18/2022 12:16	200094
Magnesium	NELAP	0.0500		25.3	mg/L	1	11/18/2022 12:16	200094
Potassium	NELAP	0.500		11.1	mg/L	5	11/18/2022 16:13	200094
Sodium	NELAP	0.0500		46.3	mg/L	1	11/18/2022 12:16	200094
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 16:00	200094
Arsenic	NELAP	0.0010		0.0027	mg/L	5	11/18/2022 18:17	200094
Barium	NELAP	0.0010		0.202	mg/L	5	11/18/2022 18:17	200094
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 16:00	200094
Boron	NELAP	0.0250		1.20	mg/L	5	11/22/2022 22:23	200094
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:17	200094
Chromium	NELAP	0.0015	J	0.0012	mg/L	5	11/22/2022 22:23	200094
Cobalt	NELAP	0.0010	J	0.0002	mg/L	5	11/18/2022 18:17	200094
Iron	NELAP	0.0250		8.33	mg/L	5	11/18/2022 18:17	200094
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:17	200094
Manganese	NELAP	0.0020		1.88	mg/L	5	11/18/2022 18:17	200094
Molybdenum	NELAP	0.0015		0.0344	mg/L	5	11/22/2022 22:23	200094
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 16:00	200094
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/18/2022 18:17	200094
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/18/2022 17:49	200209
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/13/2022 0:00	R323004



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111134-006  
 Matrix: GROUNDWATER

Work Order: 22111134  
 Report Date: 30-Dec-22  
 Client Sample ID: XPW04  
 Collection Date: 11/15/2022 17:10

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		213	mg/L	1	11/21/2022 13:02	R321424
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		13	mg/L	1	11/21/2022 13:02	R321424
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		472	mg/L	1	11/21/2022 11:56	R321574
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		124	mg/L	5	11/21/2022 11:22	R321457
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.40	mg/L	1	11/22/2022 16:21	R321523
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		56	mg/L	5	11/21/2022 11:23	R321468
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		53.2	mg/L	1	11/18/2022 12:19	200094
Lithium	NELAP	0.0050		0.0066	mg/L	1	11/18/2022 12:19	200094
Magnesium	NELAP	0.0500		26.7	mg/L	1	11/18/2022 12:19	200094
Potassium	NELAP	0.500		13.3	mg/L	5	11/18/2022 16:17	200094
Sodium	NELAP	0.0500		70.7	mg/L	1	11/18/2022 12:19	200094
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 16:06	200094
Arsenic	NELAP	0.0010	J	0.0005	mg/L	5	11/18/2022 18:23	200094
Barium	NELAP	0.0010		0.171	mg/L	5	11/18/2022 18:23	200094
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 16:06	200094
Boron	NELAP	0.0250		1.15	mg/L	5	11/22/2022 22:29	200094
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:23	200094
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/22/2022 22:29	200094
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:23	200094
Iron	NELAP	0.0250		0.479	mg/L	5	11/18/2022 18:23	200094
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:23	200094
Manganese	NELAP	0.0020		0.184	mg/L	5	11/18/2022 18:23	200094
Molybdenum	NELAP	0.0015		0.0184	mg/L	5	11/22/2022 22:29	200094
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 16:06	200094
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/18/2022 18:23	200094
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/18/2022 17:52	200209
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/13/2022 0:00	R323004



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111134-007  
 Matrix: AQUEOUS

Work Order: 22111134  
 Report Date: 30-Dec-22

Client Sample ID: EB-01

Collection Date: 11/15/2022 18:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		< 0.100	mg/L	1	11/18/2022 12:23	200094
Lithium	NELAP	0.0050		< 0.0050	mg/L	1	11/18/2022 12:23	200094
Magnesium	NELAP	0.0500		< 0.0500	mg/L	1	11/18/2022 12:23	200094
Potassium	NELAP	0.100		< 0.100	mg/L	1	11/18/2022 12:23	200094
Sodium	NELAP	0.0500		< 0.0500	mg/L	1	11/18/2022 12:23	200094
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 16:56	200094
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:29	200094
Barium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:29	200094
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 16:56	200094
Boron	NELAP	0.025	J	0.0095	mg/L	5	11/22/2022 22:35	200094
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:29	200094
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/22/2022 22:35	200094
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:29	200094
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:29	200094
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	11/22/2022 22:35	200094
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 16:56	200094
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/18/2022 18:29	200094
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	0.00006	mg/L	1	11/18/2022 17:54	200209



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111134-008  
 Matrix: GROUNDWATER

Work Order: 22111134  
 Report Date: 30-Dec-22  
 Client Sample ID: TPZ-164  
 Collection Date: 11/16/2022 9:44

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		250	mg/L	1	11/21/2022 13:18	R321424
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/21/2022 13:18	R321424
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		515	mg/L	2.5	11/21/2022 11:56	R321574
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		123	mg/L	10	11/21/2022 11:30	R321457
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.26	mg/L	1	11/22/2022 16:23	R321523
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	40		46	mg/L	10	11/21/2022 11:31	R321468
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		61.8	mg/L	1	11/18/2022 12:27	200094
Lithium	NELAP	0.0050		0.0085	mg/L	1	11/18/2022 12:27	200094
Magnesium	NELAP	0.0500		26.5	mg/L	1	11/18/2022 12:27	200094
Potassium	NELAP	0.500		10.6	mg/L	5	11/18/2022 16:21	200094
Sodium	NELAP	0.0500		78.6	mg/L	1	11/18/2022 12:27	200094
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:02	200094
Arsenic	NELAP	0.0010	J	0.0007	mg/L	5	11/18/2022 18:35	200094
Barium	NELAP	0.0010		0.0560	mg/L	5	11/18/2022 18:35	200094
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:02	200094
Boron	NELAP	0.0250		1.38	mg/L	5	11/22/2022 22:40	200094
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:35	200094
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/22/2022 22:40	200094
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:35	200094
Iron	NELAP	0.0250		4.44	mg/L	5	11/18/2022 18:35	200094
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:35	200094
Manganese	NELAP	0.0020		0.896	mg/L	5	11/18/2022 18:35	200094
Molybdenum	NELAP	0.0015		0.0176	mg/L	5	11/22/2022 22:40	200094
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:02	200094
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/18/2022 18:35	200094
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/18/2022 18:01	200209
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/13/2022 0:00	R323004



# Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111134-009  
 Matrix: GROUNDWATER

Work Order: 22111134  
 Report Date: 30-Dec-22  
 Client Sample ID: MW-192  
 Collection Date: 11/16/2022 11:28

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		363	mg/L	1	11/21/2022 13:24	R321424
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	11/21/2022 13:24	R321424
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		525	mg/L	2.5	11/21/2022 11:57	R321574
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		48	mg/L	1	11/21/2022 11:33	R321457
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.40	mg/L	1	11/22/2022 16:25	R321523
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		34	mg/L	1	11/21/2022 11:33	R321468
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		65.4	mg/L	1	11/18/2022 12:30	200094
Lithium	NELAP	0.0050		0.0492	mg/L	1	11/18/2022 12:30	200094
Magnesium	NELAP	0.0500		26.3	mg/L	1	11/18/2022 12:30	200094
Potassium	NELAP	0.100		1.07	mg/L	1	11/18/2022 12:30	200094
Sodium	NELAP	0.0500		85.9	mg/L	1	11/18/2022 12:30	200094
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	J	0.0007	mg/L	5	11/21/2022 17:09	200094
Arsenic	NELAP	0.0010		0.0034	mg/L	5	11/18/2022 18:42	200094
Barium	NELAP	0.0010		0.120	mg/L	5	11/18/2022 18:42	200094
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:09	200094
Boron	NELAP	0.0250		0.0525	mg/L	5	11/22/2022 22:46	200094
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:42	200094
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/22/2022 22:46	200094
Cobalt	NELAP	0.0010		0.0021	mg/L	5	11/22/2022 22:46	200094
Iron	NELAP	0.0250		4.91	mg/L	5	11/18/2022 18:42	200094
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 18:42	200094
Manganese	NELAP	0.0020		1.70	mg/L	5	11/18/2022 18:42	200094
Molybdenum	NELAP	0.0015		0.0043	mg/L	5	11/22/2022 22:46	200094
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:09	200094
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/18/2022 18:42	200094
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	0.00006	mg/L	1	11/18/2022 18:03	200209
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/13/2022 0:00	R323004





## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111134-010  
 Matrix: GROUNDWATER

Work Order: 22111134  
 Report Date: 30-Dec-22  
 Client Sample ID: MW-392  
 Collection Date: 11/16/2022 13:04

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		388	mg/L	1	11/21/2022 13:31	R321424
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	11/21/2022 13:31	R321424
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		1620	mg/L	1	11/21/2022 11:57	R321574
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	20		83	mg/L	2	11/21/2022 23:59	R321457
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		3.36	mg/L	1	11/22/2022 16:27	R321523
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	80		648	mg/L	20	11/22/2022 0:05	R321468
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		27.2	mg/L	1	11/18/2022 12:34	200094
Lithium	NELAP	0.0050		0.0512	mg/L	1	11/18/2022 12:34	200094
Magnesium	NELAP	0.0500		15.5	mg/L	1	11/18/2022 12:34	200094
Potassium	NELAP	0.100		4.90	mg/L	1	11/18/2022 12:34	200094
Sodium	NELAP	0.0500		666	mg/L	1	11/18/2022 12:34	200094
Strontium	NELAP	0.0100		0.967	mg/L	1	11/18/2022 12:34	200094
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	J	0.0010	mg/L	5	11/21/2022 17:15	200094
Arsenic	NELAP	0.0010		0.0042	mg/L	5	11/18/2022 19:32	200094
Barium	NELAP	0.0010		0.0460	mg/L	5	11/18/2022 19:32	200094
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:15	200094
Boron	NELAP	0.0250		1.72	mg/L	5	11/22/2022 22:52	200094
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 19:32	200094
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/22/2022 22:52	200094
Cobalt	NELAP	0.0010	J	0.0007	mg/L	5	11/18/2022 19:32	200094
Iron	NELAP	0.0250		0.381	mg/L	5	11/18/2022 19:32	200094
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 19:32	200094
Manganese	NELAP	0.0020		0.0262	mg/L	5	11/18/2022 19:32	200094
Molybdenum	NELAP	0.0015		0.0043	mg/L	5	11/22/2022 22:52	200094
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:15	200094
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/18/2022 19:32	200094
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	0.00006	mg/L	1	11/18/2022 18:05	200209
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/13/2022 0:00	R323004



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111134-011  
 Matrix: GROUNDWATER

Work Order: 22111134  
 Report Date: 30-Dec-22  
 Client Sample ID: MW-393  
 Collection Date: 11/16/2022 14:52

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		641	mg/L	1	11/21/2022 13:38	R321424
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		31	mg/L	1	11/21/2022 13:38	R321424
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		1950	mg/L	1	11/21/2022 12:11	R321574
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	200		280	mg/L	20	11/21/2022 12:10	R321457
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		5.95	mg/L	1	11/22/2022 16:28	R321523
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	80		475	mg/L	20	11/21/2022 12:11	R321468
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		11.3	mg/L	1	11/18/2022 13:50	200094
Lithium	NELAP	0.0050		0.0722	mg/L	1	11/18/2022 13:50	200094
Magnesium	NELAP	0.0500		5.73	mg/L	1	11/18/2022 13:50	200094
Potassium	NELAP	0.100		4.51	mg/L	1	11/18/2022 13:50	200094
Sodium	NELAP	0.0500		801	mg/L	1	11/18/2022 13:50	200094
Strontium	NELAP	0.0100		0.444	mg/L	1	11/18/2022 13:50	200094
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	J	0.0008	mg/L	5	11/21/2022 17:21	200094
Arsenic	NELAP	0.0010		0.0015	mg/L	5	11/18/2022 19:38	200094
Barium	NELAP	0.0010		0.0284	mg/L	5	11/18/2022 19:38	200094
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:21	200094
Boron	NELAP	0.0250		1.53	mg/L	5	11/22/2022 22:58	200094
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 19:38	200094
Chromium	NELAP	0.0015	J	0.0007	mg/L	5	11/22/2022 22:58	200094
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 19:38	200094
Iron	NELAP	0.0250		0.224	mg/L	5	11/18/2022 19:38	200094
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 19:38	200094
Manganese	NELAP	0.0020		0.0196	mg/L	5	11/18/2022 19:38	200094
Molybdenum	NELAP	0.0015		0.0075	mg/L	5	11/22/2022 22:58	200094
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:21	200094
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/18/2022 19:38	200094
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	0.00006	mg/L	1	11/18/2022 18:08	200209
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/13/2022 0:00	R323004



# Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111134-012  
 Matrix: GROUNDWATER

Work Order: 22111134  
 Report Date: 30-Dec-22  
 Client Sample ID: MW-193  
 Collection Date: 11/16/2022 16:03

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		324	mg/L	1	11/21/2022 13:46	R321424
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	11/21/2022 13:46	R321424
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		590	mg/L	2.5	11/21/2022 12:11	R321574
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		154	mg/L	5	11/21/2022 12:18	R321457
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.26	mg/L	1	11/22/2022 16:30	R321523
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		37	mg/L	1	11/21/2022 12:13	R321468
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		92.0	mg/L	1	11/18/2022 13:53	200094
Lithium	NELAP	0.0050	J	0.0019	mg/L	1	11/18/2022 13:53	200094
Magnesium	NELAP	0.0500		34.0	mg/L	1	11/18/2022 13:53	200094
Potassium	NELAP	0.100		0.986	mg/L	1	11/18/2022 13:53	200094
Sodium	NELAP	0.0500		77.4	mg/L	1	11/18/2022 13:53	200094
Strontium	NELAP	0.0100		0.280	mg/L	1	11/18/2022 13:53	200094
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:27	200094
Arsenic	NELAP	0.0010		0.0036	mg/L	5	11/18/2022 19:44	200094
Barium	NELAP	0.0010		0.115	mg/L	5	11/18/2022 19:44	200094
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:27	200094
Boron	NELAP	0.0250		0.0590	mg/L	5	11/22/2022 23:03	200094
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 19:44	200094
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/22/2022 23:03	200094
Cobalt	NELAP	0.0010		0.0010	mg/L	5	11/18/2022 19:44	200094
Iron	NELAP	0.0250		2.67	mg/L	5	11/18/2022 19:44	200094
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 19:44	200094
Manganese	NELAP	0.0020		0.986	mg/L	5	11/18/2022 19:44	200094
Molybdenum	NELAP	0.0015		0.0016	mg/L	5	11/22/2022 23:03	200094
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:27	200094
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/18/2022 19:44	200094
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/18/2022 18:10	200209
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/13/2022 0:00	R323004



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111134-013  
 Matrix: GROUNDWATER

Work Order: 22111134  
 Report Date: 30-Dec-22  
 Client Sample ID: MW-126  
 Collection Date: 11/16/2022 14:15

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		407	mg/L	1	11/21/2022 13:53	R321424
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/21/2022 13:53	R321424
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		95	mg/L	5	11/21/2022 12:34	R321457
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.28	mg/L	1	11/22/2022 16:33	R321523
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		111	mg/L	5	11/21/2022 12:35	R321468
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		91.0	mg/L	1	11/18/2022 13:57	200094
Lithium	NELAP	0.0050	J	0.0027	mg/L	1	11/18/2022 13:57	200094
Magnesium	NELAP	0.0500		30.2	mg/L	1	11/18/2022 13:57	200094
Potassium	NELAP	0.100		0.540	mg/L	1	11/18/2022 13:57	200094
Sodium	NELAP	0.0500		157	mg/L	1	11/18/2022 13:57	200094
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:34	200094
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 19:51	200094
Barium	NELAP	0.0010		0.146	mg/L	5	11/18/2022 19:51	200094
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:34	200094
Boron	NELAP	0.0250		< 0.0250	mg/L	5	11/23/2022 0:24	200094
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 19:51	200094
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/23/2022 0:24	200094
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 19:51	200094
Iron	NELAP	0.0250		0.0880	mg/L	5	11/18/2022 19:51	200094
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 19:51	200094
Manganese	NELAP	0.0020		0.0093	mg/L	5	11/18/2022 19:51	200094
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	11/23/2022 0:24	200094
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:34	200094
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/18/2022 19:51	200094
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/18/2022 18:17	200209



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111134-014  
 Matrix: GROUNDWATER

Work Order: 22111134  
 Report Date: 30-Dec-22  
 Client Sample ID: MW-116  
 Collection Date: 11/16/2022 15:33

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		405	mg/L	1	11/21/2022 13:59	R321424
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/21/2022 13:59	R321424
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		180	mg/L	5	11/21/2022 13:06	R321457
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.36	mg/L	1	11/22/2022 16:46	R321523
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		40	mg/L	1	11/21/2022 13:01	R321468
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		116	mg/L	1	11/18/2022 14:01	200094
Lithium	NELAP	0.0050	J	0.0046	mg/L	1	11/18/2022 14:01	200094
Magnesium	NELAP	0.0500		41.3	mg/L	1	11/18/2022 14:01	200094
Potassium	NELAP	0.100		0.947	mg/L	1	11/18/2022 14:01	200094
Sodium	NELAP	0.0500		90.4	mg/L	1	11/18/2022 14:01	200094
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:40	200094
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 19:57	200094
Barium	NELAP	0.0010		0.0685	mg/L	5	11/18/2022 19:57	200094
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:40	200094
Boron	NELAP	0.025	J	0.023	mg/L	5	11/23/2022 0:30	200094
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 19:57	200094
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/23/2022 0:30	200094
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 19:57	200094
Iron	NELAP	0.0250		0.0409	mg/L	5	11/23/2022 0:30	200094
Lead	NELAP	0.0010		0.0016	mg/L	5	11/18/2022 19:57	200094
Manganese	NELAP	0.0020		0.0096	mg/L	5	11/18/2022 19:57	200094
Molybdenum	NELAP	0.0015	J	0.0009	mg/L	5	11/23/2022 0:30	200094
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:40	200094
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/18/2022 19:57	200094
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	0.00006	mg/L	1	11/18/2022 18:19	200209



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111134-015  
 Matrix: GROUNDWATER

Work Order: 22111134  
 Report Date: 30-Dec-22  
 Client Sample ID: MW-306  
 Collection Date: 11/16/2022 17:04

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		28	mg/L	1	11/21/2022 14:07	R321424
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		97	mg/L	1	11/21/2022 14:07	R321424
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		266	mg/L	1	11/21/2022 12:12	R321574
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		46	mg/L	1	11/21/2022 13:09	R321457
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.64	mg/L	1	11/22/2022 16:48	R321523
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		49	mg/L	1	11/21/2022 13:09	R321468
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		1.80	mg/L	1	11/18/2022 14:04	200094
Lithium	NELAP	0.0050		0.0169	mg/L	1	11/18/2022 14:04	200094
Magnesium	NELAP	0.0500		0.0502	mg/L	1	11/18/2022 14:04	200094
Potassium	NELAP	0.100		0.936	mg/L	1	11/18/2022 14:04	200094
Sodium	NELAP	0.0500		105	mg/L	1	11/18/2022 14:04	200094
Strontium	NELAP	0.0100		0.0120	mg/L	1	11/18/2022 14:04	200094
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:46	200094
Arsenic	NELAP	0.0010		0.0103	mg/L	5	11/18/2022 20:03	200094
Barium	NELAP	0.0010		0.0051	mg/L	5	11/18/2022 20:03	200094
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:46	200094
Boron	NELAP	0.0250		0.334	mg/L	5	11/23/2022 0:36	200094
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 20:03	200094
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/23/2022 0:36	200094
Cobalt	NELAP	0.0010	J	0.0002	mg/L	5	11/18/2022 20:03	200094
Iron	NELAP	0.0250		0.0368	mg/L	5	11/18/2022 20:03	200094
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 20:03	200094
Manganese	NELAP	0.0020	J	0.0012	mg/L	5	11/18/2022 20:03	200094
Molybdenum	NELAP	0.0015		0.0162	mg/L	5	11/23/2022 0:36	200094
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:46	200094
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/18/2022 20:03	200094
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	0.00006	mg/L	1	11/18/2022 18:21	200209
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/13/2022 0:00	R323004



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111134-016  
 Matrix: AQUEOUS

Work Order: 22111134  
 Report Date: 30-Dec-22

Client Sample ID: EB-02

Collection Date: 11/16/2022 18:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		< 0.100	mg/L	1	11/18/2022 14:08	200094
Lithium	NELAP	0.0050		< 0.0050	mg/L	1	11/18/2022 14:08	200094
Magnesium	NELAP	0.0500		< 0.0500	mg/L	1	11/18/2022 14:08	200094
Potassium	NELAP	0.100		< 0.100	mg/L	1	11/18/2022 14:08	200094
Sodium	NELAP	0.0500		< 0.0500	mg/L	1	11/18/2022 14:08	200094
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:52	200094
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 20:09	200094
Barium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 20:09	200094
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:52	200094
Boron	NELAP	0.0250		< 0.0250	mg/L	5	11/23/2022 0:42	200094
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 20:09	200094
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/23/2022 0:42	200094
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 20:09	200094
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/18/2022 20:09	200094
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	11/23/2022 0:42	200094
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 17:52	200094
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/18/2022 20:09	200094
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	J	0.00006	mg/L	1	11/18/2022 18:23	200209



## Sample Summary

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

**Client:** Ramboll  
**Client Project:** Baldwin 845

**Work Order:** 22111134  
**Report Date:** 30-Dec-22

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
22111134-001	XPW06	Groundwater	3	11/15/2022 9:29
22111134-002	XPW01	Groundwater	3	11/15/2022 11:23
22111134-003	XPW05	Groundwater	3	11/15/2022 13:43
22111134-004	XPW02	Groundwater	3	11/15/2022 15:33
22111134-005	DUP-01	Groundwater	3	11/15/2022 15:43
22111134-006	XPW04	Groundwater	3	11/15/2022 17:10
22111134-007	EB-01	Aqueous	1	11/15/2022 18:00
22111134-008	TPZ-164	Groundwater	3	11/16/2022 9:44
22111134-009	MW-192	Groundwater	3	11/16/2022 11:28
22111134-010	MW-392	Groundwater	3	11/16/2022 13:04
22111134-011	MW-393	Groundwater	3	11/16/2022 14:52
22111134-012	MW-193	Groundwater	3	11/16/2022 16:03
22111134-013	MW-126	Groundwater	2	11/16/2022 14:15
22111134-014	MW-116	Groundwater	2	11/16/2022 15:33
22111134-015	MW-306	Groundwater	3	11/16/2022 17:04
22111134-016	EB-02	Aqueous	1	11/16/2022 18:45





## Dates Report

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

Client: Ramboll

Work Order: 22111134

Client Project: Baldwin 845

Report Date: 30-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
22111134-001A	XPW06	11/15/2022 9:29	11/16/2022 21:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/21/2022 12:18
	Standard Methods 2320 B 1997, 2011				11/21/2022 12:18
	Standard Methods 2540 C (Total) 1997, 2011				11/21/2022 11:54
	SW-846 9036 (Total)				11/21/2022 23:30
	SW-846 9214 (Total)				11/22/2022 16:06
	SW-846 9251 (Total)				11/21/2022 10:05
22111134-001B	XPW06	11/15/2022 9:29	11/16/2022 21:20		
	See Attached for Subcontracting Analysis				12/13/2022 0:00
22111134-001C	XPW06	11/15/2022 9:29	11/16/2022 21:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 9:25
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 15:55
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/18/2022 17:14
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/21/2022 15:41
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/22/2022 21:26
	SW-846 7470A (Total)			11/17/2022 0:58	11/18/2022 17:31
22111134-002A	XPW01	11/15/2022 11:23	11/16/2022 21:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/21/2022 12:31
	Standard Methods 2320 B 1997, 2011				11/21/2022 12:31
	Standard Methods 2540 C (Total) 1997, 2011				11/21/2022 11:54
	SW-846 9036 (Total)				11/21/2022 23:48
	SW-846 9214 (Total)				11/22/2022 16:07
	SW-846 9251 (Total)				11/21/2022 10:16
22111134-002B	XPW01	11/15/2022 11:23	11/16/2022 21:20		
	See Attached for Subcontracting Analysis				12/13/2022 0:00
22111134-002C	XPW01	11/15/2022 11:23	11/16/2022 21:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 9:29
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 15:58
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/18/2022 18:48
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/21/2022 16:12
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/22/2022 21:31
	SW-846 7470A (Total)			11/17/2022 0:58	11/18/2022 17:34
22111134-003A	XPW05	11/15/2022 13:43	11/16/2022 21:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/21/2022 12:41
	Standard Methods 2320 B 1997, 2011				11/21/2022 12:41
	Standard Methods 2540 C (Total) 1997, 2011				11/21/2022 11:55
	SW-846 9036 (Total)				11/21/2022 10:43



## Dates Report

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

Client: Ramboll

Work Order: 22111134

Client Project: Baldwin 845

Report Date: 30-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	SW-846 9214 (Total)				11/22/2022 16:12
	SW-846 9251 (Total)				11/21/2022 10:37
22111134-003B	XPW05	11/15/2022 13:43	11/16/2022 21:20		
	See Attached for Subcontracting Analysis				12/13/2022 0:00
22111134-003C	XPW05	11/15/2022 13:43	11/16/2022 21:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 9:40
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/22/2022 11:55
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/18/2022 18:04
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/21/2022 15:47
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/22/2022 22:12
	SW-846 7470A (Total)			11/17/2022 0:58	11/18/2022 17:40
22111134-004A	XPW02	11/15/2022 15:33	11/16/2022 21:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/21/2022 12:48
	Standard Methods 2320 B 1997, 2011				11/21/2022 12:48
	Standard Methods 2540 C (Total) 1997, 2011				11/21/2022 11:55
	SW-846 9036 (Total)				11/21/2022 11:01
	SW-846 9214 (Total)				11/22/2022 16:14
	SW-846 9251 (Total)				11/21/2022 11:01
22111134-004B	XPW02	11/15/2022 15:33	11/16/2022 21:20		
	See Attached for Subcontracting Analysis				12/13/2022 0:00
22111134-004C	XPW02	11/15/2022 15:33	11/16/2022 21:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 12:12
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 16:10
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/18/2022 18:10
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/21/2022 15:53
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/22/2022 22:17
	SW-846 7470A (Total)			11/17/2022 0:58	11/18/2022 17:43
22111134-005A	DUP-01	11/15/2022 15:43	11/16/2022 21:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/21/2022 12:55
	Standard Methods 2320 B 1997, 2011				11/21/2022 12:55
	Standard Methods 2540 C (Total) 1997, 2011				11/21/2022 11:55
	SW-846 9036 (Total)				11/21/2022 11:09
	SW-846 9214 (Total)				11/22/2022 16:20
	SW-846 9251 (Total)				11/21/2022 11:09
22111134-005B	DUP-01	11/15/2022 15:43	11/16/2022 21:20		
	See Attached for Subcontracting Analysis				12/13/2022 0:00
22111134-005C	DUP-01	11/15/2022 15:43	11/16/2022 21:20		



## Dates Report

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

Client: Ramboll

Work Order: 22111134

Client Project: Baldwin 845

Report Date: 30-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	<b>Test Name</b>				
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 12:16
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 16:13
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/18/2022 18:17
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/21/2022 16:00
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/22/2022 22:23
	SW-846 7470A (Total)			11/17/2022 0:58	11/18/2022 17:49
22111134-006A	XPW04	11/15/2022 17:10	11/16/2022 21:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/21/2022 13:02
	Standard Methods 2320 B 1997, 2011				11/21/2022 13:02
	Standard Methods 2540 C (Total) 1997, 2011				11/21/2022 11:56
	SW-846 9036 (Total)				11/21/2022 11:22
	SW-846 9214 (Total)				11/22/2022 16:21
	SW-846 9251 (Total)				11/21/2022 11:23
22111134-006B	XPW04	11/15/2022 17:10	11/16/2022 21:20		
	See Attached for Subcontracting Analysis				12/13/2022 0:00
22111134-006C	XPW04	11/15/2022 17:10	11/16/2022 21:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 12:19
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 16:17
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/18/2022 18:23
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/21/2022 16:06
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/22/2022 22:29
	SW-846 7470A (Total)			11/17/2022 0:58	11/18/2022 17:52
22111134-007A	EB-01	11/15/2022 18:00	11/16/2022 21:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 12:23
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/18/2022 18:29
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/21/2022 16:56
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/22/2022 22:35
	SW-846 7470A (Total)			11/17/2022 0:58	11/18/2022 17:54
22111134-008A	TPZ-164	11/16/2022 9:44	11/16/2022 21:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/21/2022 13:18
	Standard Methods 2320 B 1997, 2011				11/21/2022 13:18
	Standard Methods 2540 C (Total) 1997, 2011				11/21/2022 11:56
	SW-846 9036 (Total)				11/21/2022 11:30
	SW-846 9214 (Total)				11/22/2022 16:23
	SW-846 9251 (Total)				11/21/2022 11:31
22111134-008B	TPZ-164	11/16/2022 9:44	11/16/2022 21:20		
	See Attached for Subcontracting Analysis				12/13/2022 0:00



## Dates Report

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

Client: Ramboll

Work Order: 22111134

Client Project: Baldwin 845

Report Date: 30-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
22111134-008C	TPZ-164	11/16/2022 9:44	11/16/2022 21:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 12:27
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 16:21
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/18/2022 18:35
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/21/2022 17:02
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/22/2022 22:40
	SW-846 7470A (Total)			11/17/2022 0:58	11/18/2022 18:01
22111134-009A	MW-192	11/16/2022 11:28	11/16/2022 21:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/21/2022 13:24
	Standard Methods 2320 B 1997, 2011				11/21/2022 13:24
	Standard Methods 2540 C (Total) 1997, 2011				11/21/2022 11:57
	SW-846 9036 (Total)				11/21/2022 11:33
	SW-846 9214 (Total)				11/22/2022 16:25
	SW-846 9251 (Total)				11/21/2022 11:33
22111134-009B	MW-192	11/16/2022 11:28	11/16/2022 21:20		
	See Attached for Subcontracting Analysis				12/13/2022 0:00
22111134-009C	MW-192	11/16/2022 11:28	11/16/2022 21:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 12:30
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/18/2022 18:42
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/21/2022 17:09
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/22/2022 22:46
	SW-846 7470A (Total)			11/17/2022 0:58	11/18/2022 18:03
22111134-010A	MW-392	11/16/2022 13:04	11/16/2022 21:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/21/2022 13:31
	Standard Methods 2320 B 1997, 2011				11/21/2022 13:31
	Standard Methods 2540 C (Total) 1997, 2011				11/21/2022 11:57
	SW-846 9036 (Total)				11/21/2022 23:59
	SW-846 9214 (Total)				11/22/2022 16:27
	SW-846 9251 (Total)				11/22/2022 0:05
22111134-010B	MW-392	11/16/2022 13:04	11/16/2022 21:20		
	See Attached for Subcontracting Analysis				12/13/2022 0:00
22111134-010C	MW-392	11/16/2022 13:04	11/16/2022 21:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 12:34
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/18/2022 19:32
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/21/2022 17:15
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/22/2022 22:52
	SW-846 7470A (Total)			11/17/2022 0:58	11/18/2022 18:05



## Dates Report

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

Client: Ramboll

Work Order: 22111134

Client Project: Baldwin 845

Report Date: 30-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
22111134-011A	MW-393	11/16/2022 14:52	11/16/2022 21:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/21/2022 13:38
	Standard Methods 2320 B 1997, 2011				11/21/2022 13:38
	Standard Methods 2540 C (Total) 1997, 2011				11/21/2022 12:11
	SW-846 9036 (Total)				11/21/2022 12:10
	SW-846 9214 (Total)				11/22/2022 16:28
	SW-846 9251 (Total)				11/21/2022 12:11
22111134-011B	MW-393	11/16/2022 14:52	11/16/2022 21:20		
	See Attached for Subcontracting Analysis				12/13/2022 0:00
22111134-011C	MW-393	11/16/2022 14:52	11/16/2022 21:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 13:50
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/18/2022 19:38
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/21/2022 17:21
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/22/2022 22:58
	SW-846 7470A (Total)			11/17/2022 0:58	11/18/2022 18:08
22111134-012A	MW-193	11/16/2022 16:03	11/16/2022 21:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/21/2022 13:46
	Standard Methods 2320 B 1997, 2011				11/21/2022 13:46
	Standard Methods 2540 C (Total) 1997, 2011				11/21/2022 12:11
	SW-846 9036 (Total)				11/21/2022 12:18
	SW-846 9214 (Total)				11/22/2022 16:30
	SW-846 9251 (Total)				11/21/2022 12:13
22111134-012B	MW-193	11/16/2022 16:03	11/16/2022 21:20		
	See Attached for Subcontracting Analysis				12/13/2022 0:00
22111134-012C	MW-193	11/16/2022 16:03	11/16/2022 21:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 13:53
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/18/2022 19:44
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/21/2022 17:27
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/22/2022 23:03
	SW-846 7470A (Total)			11/17/2022 0:58	11/18/2022 18:10
22111134-013A	MW-126	11/16/2022 14:15	11/16/2022 21:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/21/2022 13:53
	Standard Methods 2320 B 1997, 2011				11/21/2022 13:53
	SW-846 9036 (Total)				11/21/2022 12:34
	SW-846 9214 (Total)				11/22/2022 16:33
	SW-846 9251 (Total)				11/21/2022 12:35
22111134-013B	MW-126	11/16/2022 14:15	11/16/2022 21:20		



## Dates Report

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

Client: Ramboll

Work Order: 22111134

Client Project: Baldwin 845

Report Date: 30-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	<b>Test Name</b>				
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 13:57
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/18/2022 19:51
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/21/2022 17:34
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/23/2022 0:24
	SW-846 7470A (Total)			11/17/2022 0:58	11/18/2022 18:17
22111134-014A	MW-116	11/16/2022 15:33	11/16/2022 21:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/21/2022 13:59
	Standard Methods 2320 B 1997, 2011				11/21/2022 13:59
	SW-846 9036 (Total)				11/21/2022 13:06
	SW-846 9214 (Total)				11/22/2022 16:46
	SW-846 9251 (Total)				11/21/2022 13:01
22111134-014B	MW-116	11/16/2022 15:33	11/16/2022 21:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 14:01
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/18/2022 19:57
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/21/2022 17:40
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/23/2022 0:30
	SW-846 7470A (Total)			11/17/2022 0:58	11/18/2022 18:19
22111134-015A	MW-306	11/16/2022 17:04	11/16/2022 21:20		
	Standard Methods 2320 B (Total) 1997, 2011				11/21/2022 14:07
	Standard Methods 2320 B 1997, 2011				11/21/2022 14:07
	Standard Methods 2540 C (Total) 1997, 2011				11/21/2022 12:12
	SW-846 9036 (Total)				11/21/2022 13:09
	SW-846 9214 (Total)				11/22/2022 16:48
	SW-846 9251 (Total)				11/21/2022 13:09
22111134-015B	MW-306	11/16/2022 17:04	11/16/2022 21:20		
	See Attached for Subcontracting Analysis				12/13/2022 0:00
22111134-015C	MW-306	11/16/2022 17:04	11/16/2022 21:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 14:04
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/18/2022 20:03
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/21/2022 17:46
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/23/2022 0:36
	SW-846 7470A (Total)			11/17/2022 0:58	11/18/2022 18:21
22111134-016A	EB-02	11/16/2022 18:45	11/16/2022 21:20		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/17/2022 10:33	11/18/2022 14:08
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/18/2022 20:09
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/21/2022 17:52
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/17/2022 10:33	11/23/2022 0:42



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22111134

**Client Project:** Baldwin 845

**Report Date:** 30-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	SW-846 7470A (Total)			11/17/2022 0:58	11/18/2022 18:23



## Quality Control Results

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

Client: Ramboll

Work Order: 22111134

Client Project: Baldwin 845

Report Date: 30-Dec-22

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

Batch R321574		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	11/21/2022
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	11/21/2022

Batch R321574		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		966	1000	0	96.6	90	110	11/21/2022
Total Dissolved Solids		20		974	1000	0	97.4	90	110	11/21/2022

Batch R321574		SampType: DUP		Units mg/L						
SampID: 22111134-002ADUP										
										RPD Limit: 5
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		398				410.0	2.97	11/21/2022

Batch R321574		SampType: DUP		Units mg/L						
SampID: 22111134-003ADUP										
										RPD Limit: 5
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		450				450.0	0.00	11/21/2022

Batch R321574		SampType: DUP		Units mg/L						
SampID: 22111134-011ADUP										
										RPD Limit: 5
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		1930				1948	0.72	11/21/2022

### SW-846 9036 (TOTAL)

Batch R321457		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	11/21/2022

Batch R321457		SampType: LCS		Units mg/L						
SampID: ICB/LCS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		19	20.00	0	95.8	90	110	11/21/2022





## Quality Control Results

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

Client: Ramboll

Work Order: 22111134

Client Project: Baldwin 845

Report Date: 30-Dec-22

### SW-846 9036 (TOTAL)

Batch R321457		SampType: MS		Units mg/L							Date Analyzed
SampID: 22111134-002AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		50		<b>200</b>	100.0	104.8	95.0	85	115	11/21/2022	

Batch R321457		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 22111134-002AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Sulfate		50		<b>205</b>	100.0	104.8	100.3	199.8	2.59	11/21/2022		

Batch R321457		SampType: MS		Units mg/L							Date Analyzed
SampID: 22111134-013AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		50		<b>186</b>	100.0	94.68	91.7	85	115	11/21/2022	

Batch R321457		SampType: MSD		Units mg/L							RPD Limit: 10	Date Analyzed
SampID: 22111134-013AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Sulfate		50		<b>195</b>	100.0	94.68	100.0	186.4	4.38	11/21/2022		

### SW-846 9214 (TOTAL)

Batch R321523		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		<b>&lt; 0.10</b>	0.0370	0	0	-100	100	11/22/2022	

Batch R321523		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		<b>0.97</b>	1.000	0	96.7	90	110	11/22/2022	

Batch R321523		SampType: MS		Units mg/L							Date Analyzed
SampID: 22111134-002AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		<b>2.46</b>	2.000	0.5010	98.0	75	125	11/22/2022	



## Quality Control Results

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

**Client:** Ramboll  
**Client Project:** Baldwin 845

**Work Order:** 22111134  
**Report Date:** 30-Dec-22

### SW-846 9214 (TOTAL)

Batch R321523		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 22111134-002AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		<b>2.53</b>	2.000	0.5010	101.6	2.460	2.88	11/22/2022	

Batch R321523		SampType: MS		Units mg/L							
SampID: 22111134-013AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		<b>2.26</b>	2.000	0.2830	98.8	75	125	11/22/2022	

Batch R321523		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 22111134-013AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		<b>2.30</b>	2.000	0.2830	100.8	2.260	1.75	11/22/2022	

Batch R321523		SampType: MS		Units mg/L							
SampID: 22111134-015AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		<b>2.64</b>	2.000	0.6400	100.2	75	125	11/22/2022	

Batch R321523		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 22111134-015AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		<b>2.67</b>	2.000	0.6400	101.4	2.645	0.87	11/22/2022	

### SW-846 9251 (TOTAL)

Batch R321468		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		<b>&lt; 4</b>	0.5000	0	0	-100	100	11/21/2022	

Batch R321468		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		<b>20</b>	20.00	0	101.0	90	110	11/21/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22111134

Client Project: Baldwin 845

Report Date: 30-Dec-22

### SW-846 9251 (TOTAL)

Batch R321468		SampType: MS		Units mg/L							Date Analyzed
SampID: 22111134-002AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Chloride		4		<b>40</b>	20.00	22.06	89.1	85	115	11/21/2022	

Batch R321468		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 22111134-002AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Chloride		4		<b>40</b>	20.00	22.06	91.1	39.88	1.00	11/21/2022		

Batch R321468		SampType: MS		Units mg/L							Date Analyzed
SampID: 22111134-013AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Chloride		20		<b>213</b>	100.0	110.8	102.4	85	115	11/21/2022	

Batch R321468		SampType: MSD		Units mg/L							RPD Limit: 15	Date Analyzed
SampID: 22111134-013AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Chloride		20		<b>198</b>	100.0	110.8	87.0	213.3	7.52	11/21/2022		

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

Batch 200094		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-200094											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		
Calcium		0.100		< <b>0.100</b>	0.0350	0	0	-100	100	11/18/2022	
Lithium	*	0.0050		< <b>0.0050</b>	0.0019	0	0	-100	100	11/18/2022	
Magnesium		0.0500		< <b>0.0500</b>	0.0055	0	0	-100	100	11/18/2022	
Potassium		0.100		< <b>0.100</b>	0.0400	0	0	-100	100	11/18/2022	
Sodium		0.0500		< <b>0.0500</b>	0.0180	0	0	-100	100	11/18/2022	
Strontium	*	0.0100		< <b>0.0100</b>	0.0013	0	0	-100	100	11/18/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22111134

Client Project: Baldwin 845

Report Date: 30-Dec-22

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

**Batch 200094**    **SampType: LCS**    Units mg/L

SampID: LCS-200094

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		<b>2.69</b>	2.500	0	107.8	85	115	11/18/2022
Lithium	*	0.0050		<b>0.545</b>	0.5000	0	109.0	85	115	11/18/2022
Magnesium		0.0500		<b>2.74</b>	2.500	0	109.6	85	115	11/18/2022
Potassium		0.100		<b>2.65</b>	2.500	0	106.1	85	115	11/18/2022
Sodium		0.0500		<b>2.45</b>	2.500	0	97.8	85	115	11/18/2022
Strontium	*	0.0100		<b>0.104</b>	0.1000	0	104.5	85	115	11/18/2022

**Batch 200094**    **SampType: MS**    Units mg/L

SampID: 22111134-002CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	<b>76.0</b>	2.500	72.52	138.0	75	125	11/18/2022
Lithium		0.0050		<b>0.551</b>	0.5000	0.01270	107.7	75	125	11/18/2022
Magnesium		0.0500		<b>22.0</b>	2.500	19.09	116.4	75	125	11/18/2022
Potassium		0.500		<b>13.0</b>	2.500	10.52	99.4	75	125	11/18/2022
Sodium		0.0500		<b>37.0</b>	2.500	34.13	113.2	75	125	11/18/2022

**Batch 200094**    **SampType: MSD**    Units mg/L

RPD Limit: 20

SampID: 22111134-002CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100	S	<b>76.0</b>	2.500	72.52	141.2	75.97	0.11	11/18/2022
Lithium		0.0050		<b>0.552</b>	0.5000	0.01270	107.8	0.5513	0.11	11/18/2022
Magnesium		0.0500		<b>21.9</b>	2.500	19.09	112.4	22.00	0.46	11/18/2022
Potassium		0.500		<b>13.4</b>	2.500	10.52	114.4	13.00	2.84	11/18/2022
Sodium		0.0500		<b>37.2</b>	2.500	34.13	122.0	36.96	0.59	11/18/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22111134

Client Project: Baldwin 845

Report Date: 30-Dec-22

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

Batch 200094    SampType: MBLK    Units mg/L

SampID: MBLK-200094

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	11/21/2022
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	11/18/2022
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	11/18/2022
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	11/21/2022
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	11/22/2022
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	11/18/2022
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	11/22/2022
Cobalt		0.0010		< 0.0010	0.0002	0	0	-100	100	11/18/2022
Iron		0.0250		< 0.0250	0.0115	0	0	-100	100	11/18/2022
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	11/18/2022
Manganese		0.0020		< 0.0020	0.0010	0	0	-100	100	11/18/2022
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	11/22/2022
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	11/21/2022
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	11/18/2022

Batch 200094    SampType: LCS    Units mg/L

SampID: LCS-200094

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.527	0.5000	0	105.3	80	120	11/21/2022
Arsenic		0.0010		0.537	0.5000	0	107.5	80	120	11/18/2022
Barium		0.0010		2.11	2.000	0	105.5	80	120	11/18/2022
Beryllium		0.0010		0.0453	0.0500	0	90.6	80	120	11/21/2022
Boron		0.0250		0.543	0.5000	0	108.6	80	120	11/22/2022
Cadmium		0.0010		0.0570	0.0500	0	114.0	80	120	11/18/2022
Chromium		0.0015		0.218	0.2000	0	108.8	80	120	11/22/2022
Cobalt		0.0010		0.505	0.5000	0	101.0	80	120	11/18/2022
Iron		0.0250		2.01	2.000	0	100.6	80	120	11/18/2022
Lead		0.0010		0.526	0.5000	0	105.3	80	120	11/18/2022
Manganese		0.0020		0.514	0.5000	0	102.8	80	120	11/18/2022
Molybdenum		0.0015		0.521	0.5000	0	104.2	80	120	11/22/2022
Selenium		0.0010		0.491	0.5000	0	98.3	80	120	11/21/2022
Thallium		0.0020		0.257	0.2500	0	102.7	80	120	11/18/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22111134

Client Project: Baldwin 845

Report Date: 30-Dec-22

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

Batch 200094    SampType: MS    Units mg/L

SampleID: 22111134-002CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		<b>0.490</b>	0.5000	0	97.9	75	125	11/21/2022
Arsenic		0.0010		<b>0.560</b>	0.5000	0.0006759	111.8	75	125	11/18/2022
Barium		0.0010		<b>2.33</b>	2.000	0.1080	111.3	75	125	11/18/2022
Beryllium		0.0010		<b>0.0445</b>	0.0500	0	88.9	75	125	11/21/2022
Boron		0.0250		<b>1.49</b>	0.5000	1.031	92.6	75	125	11/22/2022
Cadmium		0.0010		<b>0.0617</b>	0.0500	0	123.5	75	125	11/18/2022
Chromium		0.0015		<b>0.201</b>	0.2000	0.001325	99.6	75	125	11/22/2022
Cobalt		0.0010		<b>0.528</b>	0.5000	0.0001890	105.6	75	125	11/18/2022
Iron		0.0250		<b>3.75</b>	2.000	1.837	95.7	75	125	11/22/2022
Lead		0.0010		<b>0.555</b>	0.5000	0	111.1	75	125	11/18/2022
Manganese		0.0020		<b>0.647</b>	0.5000	0.1062	108.2	75	125	11/18/2022
Molybdenum		0.0015		<b>0.564</b>	0.5000	0.05745	101.2	75	125	11/22/2022
Selenium		0.0010		<b>0.472</b>	0.5000	0	94.3	75	125	11/21/2022
Thallium		0.0020		<b>0.272</b>	0.2500	0	108.9	75	125	11/18/2022

Batch 200094    SampType: MSD    Units mg/L

RPD Limit: 20

SampleID: 22111134-002CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		<b>0.509</b>	0.5000	0	101.8	0.4895	3.89	11/21/2022
Arsenic		0.0010		<b>0.563</b>	0.5000	0.0006759	112.4	0.5597	0.57	11/18/2022
Barium		0.0010		<b>2.27</b>	2.000	0.1080	108.2	2.333	2.66	11/18/2022
Beryllium		0.0010		<b>0.0467</b>	0.0500	0	93.5	0.04447	4.96	11/21/2022
Boron		0.0250		<b>1.55</b>	0.5000	1.031	103.8	1.494	3.68	11/22/2022
Cadmium		0.0010		<b>0.0594</b>	0.0500	0	118.7	0.06173	3.90	11/18/2022
Chromium		0.0015		<b>0.211</b>	0.2000	0.001325	104.8	0.2006	5.03	11/22/2022
Cobalt		0.0010		<b>0.513</b>	0.5000	0.0001890	102.6	0.5281	2.86	11/18/2022
Iron		0.0250		<b>3.93</b>	2.000	1.837	104.4	3.750	4.56	11/22/2022
Lead		0.0010		<b>0.544</b>	0.5000	0	108.8	0.5555	2.09	11/18/2022
Manganese		0.0020		<b>0.633</b>	0.5000	0.1062	105.4	0.6472	2.16	11/18/2022
Molybdenum		0.0015		<b>0.583</b>	0.5000	0.05745	105.2	0.5636	3.46	11/22/2022
Selenium		0.0010		<b>0.488</b>	0.5000	0	97.6	0.4716	3.42	11/21/2022
Thallium		0.0020		<b>0.274</b>	0.2500	0	109.7	0.2723	0.68	11/18/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22111134

Client Project: Baldwin 845

Report Date: 30-Dec-22

### SW-846 7470A (TOTAL)

Batch 200209		SampType: MBLK		Units mg/L							
SampID: MBLK-200209											
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	11/18/2022	

Batch 200209		SampType: LCS		Units mg/L							
SampID: LCS-200209											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00491	0.0050	0	98.3	85	115	11/18/2022	

Batch 200209		SampType: MS		Units mg/L							
SampID: 22111134-002CMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00477	0.0050	0	95.3	75	125	11/18/2022	

Batch 200209		SampType: MSD		Units mg/L							
SampID: 22111134-002CMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		0.00480	0.0050	0	95.9	0.004767	0.62	11/18/2022	

Batch 200209		SampType: MS		Units mg/L							
SampID: 22111134-007AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00491	0.0050	0.00005630	97.1	75	125	11/18/2022	

Batch 200209		SampType: MSD		Units mg/L							
SampID: 22111134-007AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		0.00489	0.0050	0.00005630	96.6	0.004911	0.53	11/18/2022	



# Receiving Check List

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

Client: Ramboll

Work Order: 22111134

Client Project: Baldwin 845

Report Date: 30-Dec-22

Carrier: Employee

Received By: SW

Completed by:

Reviewed by:

On:

17-Nov-22

Timothy W. Mathis

On:

17-Nov-22

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

- |   |   |   |  |                                  |
|---|---|---|--|----------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             | Not Present <input type="checkbox"/>   | Temp °C <b>0.2</b>               |
| Type of thermal preservation?                           | None <input type="checkbox"/>           | Ice <input checked="" type="checkbox"/> | Blue Ice <input type="checkbox"/>      | Dry Ice <input type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Reported field parameters measured:                     | Field <input type="checkbox"/>          | Lab <input type="checkbox"/>            | NA <input checked="" type="checkbox"/> |                                  |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |

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

- |   |   |                             |   |
|---|---|-----------------------------|---|
| Water – at least one vial per sample has zero headspace?  | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | No VOA vials <input checked="" type="checkbox"/>      |
| Water - TOX containers have zero headspace?               | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | No TOX containers <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt?                       | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/>                           |
| NPDES/CWA TCN interferences checked/treated in the field? | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/>                |

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

pH strip #83856. - BNB/TMathis - 11/17/2022 9:28:37 AM



# CHAIN OF CUSTODY

pg. 1 of 2 Work order # 2211134

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

**Client:** Ramboll  
**Address:** 300 S. Wacker Drive  
**City / State / Zip:** Chicago, IL 60606  
**Contact:** Eric Bauer **Phone:** (414) 837-3687  
**E-Mail:** eric.bauer@ramboll.com **Fax:** \_\_\_\_\_

**Samples on:**  ICE  BLUE ICE  NO ICE 0.2 °C LTG# 3  
**Preserved in:**  LAB  FIELD **FOR LAB USE ONLY**  
**Lab Notes:** pH 8.3556 SUB

Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No  
 Are these samples known to be hazardous?  Yes  No  
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section.  Yes  No

**Client Comments:**  
 \*Sb As Ba Be B Cd Ca Cr Co Pb Li Mg Hg Mo K Se Na TI (ICP, ICP/MS, CVAA)

Project Name/Number <u>Baldwin 845</u>		Sample Collector's Name <u>Andrew Hardwick</u>		MATRIX		INDICATE ANALYSIS REQUESTED																						
Results Requested <input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)		Billing Instructions		# and Type of Containers		Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	ALK B / ALK C	Cl / SO4	Fe Mn	Fluoride	Raz26/228	Sr	TDS	Total Metals* <i>(Total Volume)</i>	MS/MSD <i>(Total Volume)</i>								
UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH																						NaHSO4	OTHER
Lab Use Only	Sample Identification	Date/Time Sampled	UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER																		
<u>001</u>	<u>XPW06</u>	<u>11/15/22 09:29</u>	<u>1</u>	<u>3</u>							X	X	X	X	X	X	X	X	X									
<u>002</u>	<u>XPW01</u>	<u>11/15/22 11:23</u>	<u>3</u>	<u>9</u>							X	X	X	X	X	X	X	X	X	X								
<u>003</u>	<u>XPW05</u>	<u>11/15/22 13:43</u>	<u>1</u>	<u>3</u>							X	X	X	X	X	X	X	X	X	X								
<u>004</u>	<u>XPW02</u>	<u>11/15/22 15:33</u>	<u>1</u>	<u>3</u>							X	X	X	X	X	X	X	X	X	X								
<u>005</u>	<u>DUP-01</u>	<u>11/15/22 15:43</u>	<u>1</u>	<u>3</u>							X	X	X	X	X	X	X	X	X	X								
<u>006</u>	<u>XPW04</u>	<u>11/15/22 17:10</u>	<u>1</u>	<u>3</u>							X	X	X	X	X	X	X	X	X	X								
<u>007</u>	<u>EB-01</u>	<u>11/15/22 18:00</u>									X										X							
<u>008</u>	<u>TPZ-164</u>	<u>11/16/22 09:44</u>	<u>1</u>	<u>3</u>							X	X	X	X	X	X	X	X	X	X								
<u>009</u>	<u>MW-192</u>	<u>11/16/22 11:28</u>	<u>1</u>	<u>3</u>							X	X	X	X	X	X	X	X	X	X								
<u>010</u>	<u>MW-392</u>	<u>11/16/22 13:04</u>	<u>1</u>	<u>3</u>							X	X	X	X	X	X	X	X	X	X								

Relinquished By	Date/Time	Received By	Date/Time
<u>[Signature]</u> (Ramboll)	<u>11/16/22 21:20</u>	<u>[Signature]</u>	<u>11/16/22 21:20</u>

# CHAIN OF CUSTODY

pg. 2 of 2 Work order # 2211134

**TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005**

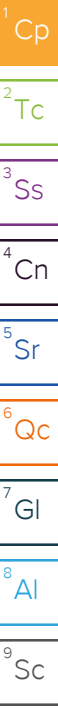
**Client:** Ramboll  
**Address:** 300 S. Wacker Drive  
**City / State / Zip:** Chicago, IL 60606  
**Contact:** Eric Bauer **Phone:** (414) 837-3687  
**E-Mail:** eric.bauer@ramboll.com **Fax:** \_\_\_\_\_

**Samples on:**  ICE  BLUE ICE  NO ICE 0.1 °C LTG# \_\_\_\_\_  
**Preserved in:**  LAB  FIELD **FOR LAB USE ONLY**  
**Lab Notes**

**Client Comments:**  
 \*Sb As Ba Be B Cd Ca Cr Co Pb Li Mg Hg Mo K Se Na Ti (ICP, ICP/MS, CVAA)  
 Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No  
 Are these samples known to be hazardous?  Yes  No  
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section.  Yes  No

Project Name/Number Baldwin 845		Sample Collector's Name <u>ANDREW HARDWICK</u>		# and Type of Containers		MATRIX		INDICATE ANALYSIS REQUESTED																			
Results Requested <input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other _____ <input type="checkbox"/> 3 Day (50% Surcharge)		Billing Instructions		UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	ALK B / ALK C	Cl / SO4	Fe Mn	Fluoride	Ra226/228	Sr	TDS	Total Metals*		
Lab Use Only	Sample Identification	Date/Time Sampled																									
<u>2211134-011</u>	<u>MW-393</u>	<u>11/16/22</u>	<u>1452</u>	<u>1</u>	<u>3</u>												X	X	X	X	X	X	X	X	X	X	
<u>012</u>	<u>MW-193</u>	<u>11/16/22</u>	<u>16:03</u>	<u>1</u>	<u>3</u>												X	X	X	X	X	X	X	X	X	X	
<u>013</u>	<u>MW-305</u>	<u>11/16/22</u>	<u>1415</u>	<u>1</u>	<u>15</u>												X	X	X	X					X		
<u>014</u>	<u>MW-2043</u>	<u>11/16/22</u>	<u>1533</u>	<u>1</u>	<u>1</u>												X	X	X	X					X		
<u>015</u>	<u>MW-306</u>	<u>11/16/22</u>	<u>1704</u>	<u>1</u>	<u>3</u>												X	X	X	X	X	X	X	X	X	X	
<u>016</u>	<u>EB-02</u>	<u>11/16/22</u>	<u>1845</u>	<u>1</u>	<u>1</u>							X													X		

Relinquished By	Date/Time	Received By	Date/Time
<u>[Signature]</u>	<u>11/16/22 0920</u>	<u>[Signature]</u>	<u>11/19/22 8120</u>



## TEKLAB, Inc.

Sample Delivery Group: L1560379

Samples Received: 11/21/2022

Project Number: 22111134

Description:

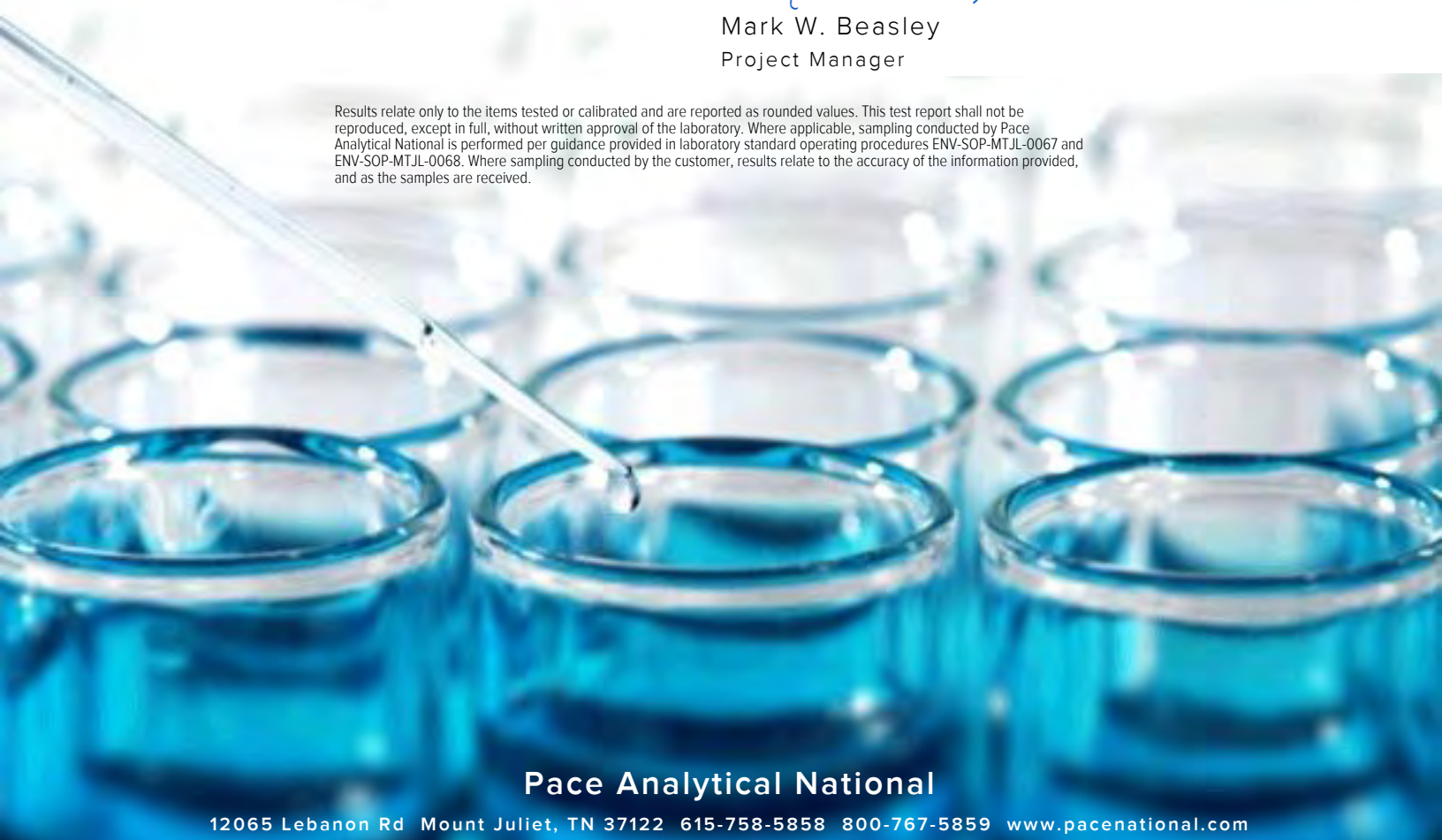
Report To: Elizabeth Hurley  
5445 Horseshoe Lake Road  
Collinsville, IL 62234

Entire Report Reviewed By:



Mark W. Beasley  
Project Manager



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



Pace Analytical National

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

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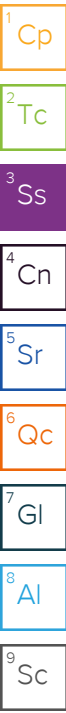
# SAMPLE SUMMARY

## 2211134-001 L1560379-01 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/15/22 09:29  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964540	1	11/30/22 10:46	12/13/22 10:24	RRE	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RGT	Mt. Juliet, TN



## 2211134-002 L1560379-02 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/15/22 11:23  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964540	1	11/30/22 10:46	12/13/22 10:24	RRE	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RGT	Mt. Juliet, TN

## 2211134-003 L1560379-03 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/15/22 13:43  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964540	1	11/30/22 10:46	12/13/22 10:24	RRE	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RGT	Mt. Juliet, TN

## 2211134-004 L1560379-04 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/15/22 15:33  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964540	1	11/30/22 10:46	12/13/22 10:24	RRE	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RGT	Mt. Juliet, TN

## 2211134-005 L1560379-05 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/15/22 15:43  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964540	1	11/30/22 10:46	12/13/22 10:24	RRE	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RGT	Mt. Juliet, TN

## 2211134-006 L1560379-06 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/15/22 17:10  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964540	1	11/30/22 10:46	12/13/22 10:24	RRE	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RGT	Mt. Juliet, TN

# SAMPLE SUMMARY

## 2211134-008 L1560379-07 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/16/22 09:44  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964540	1	11/30/22 10:46	12/13/22 10:24	RRE	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RGT	Mt. Juliet, TN

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

## 2211134-009 L1560379-08 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/16/22 11:28  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964540	1	11/30/22 10:46	12/13/22 10:24	RRE	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RGT	Mt. Juliet, TN

## 2211134-010 L1560379-09 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/16/22 13:04  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964540	1	11/30/22 10:46	12/13/22 10:24	RRE	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RGT	Mt. Juliet, TN

## 2211134-011 L1560379-10 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/16/22 14:52  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964540	1	11/30/22 10:46	12/13/22 10:24	RRE	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RGT	Mt. Juliet, TN

## 2211134-012 L1560379-11 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/16/22 16:03  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964540	1	11/30/22 10:46	12/13/22 10:24	RRE	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966875	1	12/09/22 12:04	12/13/22 15:38	RGT	Mt. Juliet, TN

## 2211134-015 L1560379-12 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/16/22 17:04  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964540	1	11/30/22 10:46	12/13/22 10:24	RRE	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966875	1	12/09/22 12:04	12/13/22 15:58	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966875	1	12/09/22 12:04	12/13/22 15:58	RGT	Mt. Juliet, TN

# CASE NARRATIVE

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



Mark W. Beasley  
Project Manager

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.440		0.205	0.360	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Barium	104			30.0-143	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Yttrium	112			30.0-136	12/13/2022 10:24	<a href="#">WG1964540</a>

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

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.702		0.283	0.415	12/13/2022 15:38	<a href="#">WG1966875</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.262		0.195	0.207	12/13/2022 15:38	<a href="#">WG1966875</a>
(T) Barium-133	113			30.0-143	12/13/2022 15:38	<a href="#">WG1966875</a>



Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.104	<u>U</u>	0.186	0.339	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Barium	102			30.0-143	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Yttrium	111			30.0-136	12/13/2022 10:24	<a href="#">WG1964540</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.123	<u>U</u>	0.240	0.442	12/13/2022 15:38	<a href="#">WG1966875</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0199	<u>U</u>	0.151	0.284	12/13/2022 15:38	<a href="#">WG1966875</a>
(T) Barium-133	118			30.0-143	12/13/2022 15:38	<a href="#">WG1966875</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.359	J	0.239	0.424	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Barium	95.7			30.0-143	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Yttrium	103			30.0-136	12/13/2022 10:24	<a href="#">WG1964540</a>

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

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.419	J	0.261	0.457	12/13/2022 15:38	<a href="#">WG1966875</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0605	U	0.105	0.171	12/13/2022 15:38	<a href="#">WG1966875</a>
(T) Barium-133	113			30.0-143	12/13/2022 15:38	<a href="#">WG1966875</a>

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.0333	<u>U</u>	0.219	0.402	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Barium	104			30.0-143	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Yttrium	111			30.0-136	12/13/2022 10:24	<a href="#">WG1964540</a>

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.349	<u>J</u>	0.317	0.464	12/13/2022 15:38	<a href="#">WG1966875</a>

<sup>4</sup>Cn

<sup>5</sup>Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.349		0.229	0.231	12/13/2022 15:38	<a href="#">WG1966875</a>
(T) Barium-133	120			30.0-143	12/13/2022 15:38	<a href="#">WG1966875</a>

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.307	J	0.245	0.438	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Barium	102			30.0-143	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Yttrium	94.7			30.0-136	12/13/2022 10:24	<a href="#">WG1964540</a>

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.668		0.352	0.520	12/13/2022 15:38	<a href="#">WG1966875</a>

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.362		0.253	0.280	12/13/2022 15:38	<a href="#">WG1966875</a>
(T) Barium-133	120			30.0-143	12/13/2022 15:38	<a href="#">WG1966875</a>

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.0767	<u>U</u>	0.265	0.480	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Barium	106			30.0-143	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Yttrium	87.0			30.0-136	12/13/2022 10:24	<a href="#">WG1964540</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.134	<u>U</u>	0.319	0.570	12/13/2022 15:38	<a href="#">WG1966875</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0573	<u>U</u>	0.177	0.307	12/13/2022 15:38	<a href="#">WG1966875</a>
(T) Barium-133	120			30.0-143	12/13/2022 15:38	<a href="#">WG1966875</a>

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

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.0654	<u>U</u>	0.243	0.443	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Barium	104			30.0-143	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Yttrium	110			30.0-136	12/13/2022 10:24	<a href="#">WG1964540</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.194	<u>U</u>	0.317	0.538	12/13/2022 15:38	<a href="#">WG1966875</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.129	<u>J</u>	0.203	0.306	12/13/2022 15:38	<a href="#">WG1966875</a>
(T) Barium-133	112			30.0-143	12/13/2022 15:38	<a href="#">WG1966875</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.889		0.249	0.424	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Barium	103			30.0-143	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Yttrium	111			30.0-136	12/13/2022 10:24	<a href="#">WG1964540</a>

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.06		0.311	0.489	12/13/2022 15:38	<a href="#">WG1966875</a>

<sup>4</sup>Cn

<sup>5</sup>Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.175	J	0.186	0.244	12/13/2022 15:38	<a href="#">WG1966875</a>
(T) Barium-133	112			30.0-143	12/13/2022 15:38	<a href="#">WG1966875</a>

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.289	J	0.233	0.416	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Barium	106			30.0-143	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Yttrium	121			30.0-136	12/13/2022 10:24	<a href="#">WG1964540</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.362	J	0.286	0.496	12/13/2022 15:38	<a href="#">WG1966875</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0735	U	0.165	0.270	12/13/2022 15:38	<a href="#">WG1966875</a>
(T) Barium-133	101			30.0-143	12/13/2022 15:38	<a href="#">WG1966875</a>

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



Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.440		0.213	0.375	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Barium	105			30.0-143	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Yttrium	113			30.0-136	12/13/2022 10:24	<a href="#">WG1964540</a>

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

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.495		0.239	0.417	12/13/2022 15:38	<a href="#">WG1966875</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0554	<u>U</u>	0.108	0.183	12/13/2022 15:38	<a href="#">WG1966875</a>
(T) Barium-133	102			30.0-143	12/13/2022 15:38	<a href="#">WG1966875</a>

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.394	J	0.239	0.423	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Barium	98.9			30.0-143	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Yttrium	97.3			30.0-136	12/13/2022 10:24	<a href="#">WG1964540</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.407	J	0.265	0.483	12/13/2022 15:38	<a href="#">WG1966875</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0123	U	0.114	0.233	12/13/2022 15:38	<a href="#">WG1966875</a>
(T) Barium-133	99.8			30.0-143	12/13/2022 15:38	<a href="#">WG1966875</a>

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

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.299	<u>U</u>	0.226	0.424	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Barium	107			30.0-143	12/13/2022 10:24	<a href="#">WG1964540</a>
(T) Yttrium	105			30.0-136	12/13/2022 10:24	<a href="#">WG1964540</a>

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.103	<u>U</u>	0.298	0.524	12/13/2022 15:58	<a href="#">WG1966875</a>

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.103	<u>U</u>	0.194	0.308	12/13/2022 15:58	<a href="#">WG1966875</a>
(T) Barium-133	101			30.0-143	12/13/2022 15:58	<a href="#">WG1966875</a>

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3876809-1 12/13/22 10:24

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-228	0.368		0.158	0.276
(T) Barium	92.7		92.7	
(T) Yttrium	113		113	

L1556155-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1556155-01 12/13/22 10:24 • (DUP) R3876809-5 12/13/22 10:24

Analyte	Original Result pCi/l	Original Uncertainty + / -	Original MDA pCi/l	DUP Result pCi/l	DUP Uncertainty + / -	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.127	0.190	0.346	0.891	0.297	0.346	1	150	2.17		20	3
(T) Barium	103			107	107							
(T) Yttrium	104			117	117							

Laboratory Control Sample (LCS)

(LCS) R3876809-2 12/13/22 10:24

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.30	106	80.0-120	
(T) Barium			87.8		
(T) Yttrium			105		

L1560379-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1560379-02 12/13/22 10:24 • (MS) R3876809-3 12/13/22 10:24 • (MSD) R3876809-4 12/13/22 10:24

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	10.0	0.104	10.1	10.2	99.5	101	1	70.0-130			1.38		20
(T) Barium		102			107	113							
(T) Yttrium		111			107	104							

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3872369-1 12/13/22 14:32

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-226	0.000	<u>U</u>	0.0342	0.0707
(T) Barium-133	93.6		93.6	

Laboratory Control Sample (LCS)

(LCS) R3872369-2 12/13/22 14:32

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.02	4.65	92.7	80.0-120	
(T) Barium-133			86.6		

L1560368-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1560368-18 12/13/22 15:38 • (MS) R3872369-3 12/13/22 14:32 • (MSD) R3872369-4 12/13/22 14:32

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.154	17.1	17.7	84.9	87.8	1	75.0-125			3.39		20
(T) Barium-133		101			100	97.3							

L1560379-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1560379-02 12/13/22 15:38 • (MS) R3872369-5 12/13/22 14:32 • (MSD) R3872369-6 12/13/22 14:32

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.0199	21.2	22.5	106	112	1	75.0-125			6.00		20
(T) Barium-133		118			90.9	88.2							

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

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

### Abbreviations and Definitions

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

### Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

# ACCREDITATIONS & LOCATIONS

## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

E099

TEKLAB, INC. Chain of Custody

5445 Horseshoe Lake Road, Collinsville, IL 62234 Phone (618)

Sample Receipt Checklist

COC Seal Present/Intact:  Y  N If Applicable

COC Signed/Accurate:  Y  N VOA Zero Headspace:  Y  N

Bottles arrive intact:  Y  N Pres. Correct/Check:  Y  N

Correct bottles used:  Y  N

Sufficient volume sent:  Y  N

RAD Screen <0.5 mR/hr:  Y  N

*MSAC*  
*4.5 to 4.5*

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

Teklab Inc  
5445 Horseshoe Lake Road  
Collinsville, IL 62234

Cooler Temp:  Sampler:  QC Level:

Project#

Comments:   
Please analyze for Radium 22/228 per methods specified for Vistra/Ramboll projects.  
I Collected at an IL site.  
Batch QC is required for all analyses requested. EDD requested.

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

*4560379*

PLEASE NOTE:

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

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix	Ra226/228	Ms/MSD													
-01	22111134-001	11/15/22 0929	HNO3	Groundwater	<input checked="" type="checkbox"/>														
-02	22111134-002	11/15/22 1123	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>													
-03	22111134-003	11/15/22 1343	HNO3	Groundwater	<input checked="" type="checkbox"/>														
-04	22111134-004	11/15/22 1533	HNO3	Groundwater	<input checked="" type="checkbox"/>														
-05	22111134-005	11/15/22 1543	HNO3	Groundwater	<input checked="" type="checkbox"/>														
-06	22111134-006	11/15/22 1710	HNO3	Groundwater	<input checked="" type="checkbox"/>														
-07	22111134-008	11/16/22 0944	HNO3	Groundwater	<input checked="" type="checkbox"/>														
-08	22111134-009	11/16/22 1128	HNO3	Groundwater	<input checked="" type="checkbox"/>														
-09	22111134-010	11/16/22 1304	HNO3	Groundwater	<input checked="" type="checkbox"/>														
-10	22111134-011	11/16/22 1452	HNO3	Groundwater	<input checked="" type="checkbox"/>														
-11	22111134-012	11/16/22 1603	HNO3	Groundwater	<input checked="" type="checkbox"/>														

*Relinquished By	Date/Time	Received By	Date/Time
<i>[Signature]</i>	<i>11/17/22</i>	<i>[Signature]</i>	<i>11-21-22 0830</i>



### TEKLAB, INC. Chain of Custody

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

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

**Teklab Inc**  
 5445 Horseshoe Lake Road  
 Collinsville, IL 62234

Cooler Temp:  Sampler:  QC Level:

Project#

Comments: **Please issue reports and invoices via email only**  
 Please analyze for Radium 226/228 per methods specified for Vistra/Ramboll projects.  
 Collected at an IL site.  
 Batch QC is required for all analyses requested. EDD requested.

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

Phone:

L1560379

**PLEASE NOTE:**

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

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix	Ra226/228												
-12	22111134-015	11/16/22 1704	HNO3	Groundwater	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			HNO3	Groundwater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			HNO3	Groundwater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			HNO3	Groundwater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			HNO3	Groundwater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			HNO3	Groundwater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			HNO3	Groundwater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			HNO3	Groundwater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			HNO3	Groundwater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			HNO3	Groundwater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Relinquished By	Date/Time	Received By	Date/Time
	11-17-22		11-21-22 0830

L15600379

Tracking Numbers	FEI Ex	Temperature
58215898 <sup>10</sup>		NSA2 3.1
58215898	3010	5.8
58215898	3032	5.0
	3021	4.1

December 20, 2022

Eric Bauer  
Ramboll  
300 S. Wacker Drive  
Suite 130  
Chicago, IL 60606  
TEL: (414) 837-3687  
FAX: (414) 837-3608



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

**RE:** Baldwin 845

**WorkOrder:** 22111237

Dear Eric Bauer:

TEKLAB, INC received 12 samples on 11/17/2022 9:02:00 PM for the analysis presented in the following report.

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

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

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

Sincerely,



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



## Report Contents

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

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**Client:** Ramboll

**Work Order:** 22111237

**Client Project:** Baldwin 845

**Report Date:** 20-Dec-22

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**This reporting package includes the following:**

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Dates Report	20
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**Client:** Ramboll

**Work Order:** 22111237

**Client Project:** Baldwin 845

**Report Date:** 20-Dec-22

### 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)

**Client:** Ramboll

**Work Order:** 22111237

**Client Project:** Baldwin 845

**Report Date:** 20-Dec-22

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### Qualifiers

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

**Client:** Ramboll

**Work Order:** 22111237

**Client Project:** Baldwin 845

**Report Date:** 20-Dec-22

**Cooler Receipt Temp:** 3.8 °C

Radium-226 and Radium-228 analysis was performed by Pace Analytical National. See attached report for results.

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**Locations**

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**Collinsville**

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

---

**Collinsville Air**

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

---

**Springfield**

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

---

**Chicago**

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

---

**Kansas City**

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



## Accreditations

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

**Client:** Ramboll

**Work Order:** 22111237

**Client Project:** Baldwin 845

**Report Date:** 20-Dec-22

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





# Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111237-001  
 Matrix: GROUNDWATER

Work Order: 22111237  
 Report Date: 20-Dec-22  
 Client Sample ID: MW-394  
 Collection Date: 11/17/2022 9:04

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		581	mg/L	1	11/29/2022 13:03	R321699
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	11/29/2022 13:03	R321699
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20	H	1990	mg/L	1	11/30/2022 10:10	R321803
<i>Sample analysis did not meet hold time requirements.</i>								
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	200		336	mg/L	20	12/01/2022 13:35	R321821
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		3.89	mg/L	1	11/29/2022 10:55	R321697
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	200		576	mg/L	50	12/05/2022 11:14	R321915
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		23.5	mg/L	1	11/22/2022 23:00	200263
Lithium	NELAP	0.0050		0.0571	mg/L	1	11/28/2022 20:29	200263
Magnesium	NELAP	0.0500		10.0	mg/L	1	11/22/2022 23:00	200263
Potassium	NELAP	0.100		4.01	mg/L	1	11/22/2022 23:00	200263
Sodium	NELAP	0.0500		736	mg/L	1	11/22/2022 23:00	200263
Strontium	NELAP	0.0100		0.469	mg/L	1	11/22/2022 23:00	200263
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0026	mg/L	5	11/22/2022 15:27	200263
Arsenic	NELAP	0.0010	J	0.0010	mg/L	5	11/22/2022 15:27	200263
Barium	NELAP	0.0010		0.0285	mg/L	5	11/22/2022 15:27	200263
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 22:37	200263
Boron	NELAP	0.0250		1.87	mg/L	5	11/21/2022 22:37	200263
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 22:37	200263
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/22/2022 15:27	200263
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 15:27	200263
Iron	NELAP	0.0250		0.0799	mg/L	5	11/22/2022 15:27	200263
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 15:27	200263
Manganese	NELAP	0.0020		0.0755	mg/L	5	11/22/2022 15:27	200263
Molybdenum	NELAP	0.0015		0.0113	mg/L	5	11/22/2022 15:27	200263
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 22:37	200263
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/21/2022 22:37	200263
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/21/2022 11:23	200271
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/10/2022 0:00	R322555



# Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111237-002  
 Matrix: GROUNDWATER

Work Order: 22111237  
 Report Date: 20-Dec-22  
 Client Sample ID: MW-194  
 Collection Date: 11/17/2022 10:38

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		305	mg/L	1	11/29/2022 13:12	R321699
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/29/2022 13:12	R321699
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20	H	530	mg/L	1	11/30/2022 10:11	R321803
<i>Sample analysis did not meet hold time requirements.</i>								
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		121	mg/L	5	12/01/2022 13:51	R321821
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.26	mg/L	1	11/29/2022 10:57	R321697
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		29	mg/L	1	12/01/2022 13:45	R321823
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		83.9	mg/L	1	11/22/2022 23:03	200263
Lithium	NELAP	0.0050	J	0.0038	mg/L	1	11/28/2022 20:32	200263
Magnesium	NELAP	0.0500		32.2	mg/L	1	11/22/2022 23:03	200263
Potassium	NELAP	0.100		0.835	mg/L	1	11/22/2022 23:03	200263
Sodium	NELAP	0.0500		52.1	mg/L	1	11/22/2022 23:03	200263
Strontium	NELAP	0.0100		0.274	mg/L	1	11/22/2022 23:03	200263
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 15:33	200263
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 15:33	200263
Barium	NELAP	0.0010		0.0755	mg/L	5	11/22/2022 15:33	200263
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 22:43	200263
Boron	NELAP	0.025	J	0.023	mg/L	5	11/21/2022 22:43	200263
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 22:43	200263
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/22/2022 15:33	200263
Cobalt	NELAP	0.0010	J	0.0006	mg/L	5	11/22/2022 15:33	200263
Iron	NELAP	0.0250		0.0632	mg/L	5	11/22/2022 15:33	200263
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 15:33	200263
Manganese	NELAP	0.0020		0.603	mg/L	5	11/22/2022 15:33	200263
Molybdenum	NELAP	0.0015		0.0022	mg/L	5	11/22/2022 15:33	200263
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 22:43	200263
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/21/2022 22:43	200263
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/21/2022 11:25	200271
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/10/2022 0:00	R322555



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111237-003  
 Matrix: GROUNDWATER

Work Order: 22111237  
 Report Date: 20-Dec-22  
 Client Sample ID: MW-307  
 Collection Date: 11/17/2022 10:54

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		264	mg/L	1	11/29/2022 13:19	R321699
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		112	mg/L	1	11/29/2022 13:19	R321699
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		81	mg/L	5	12/01/2022 13:58	R321821
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.68	mg/L	1	11/29/2022 10:59	R321697
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		206	mg/L	5	12/01/2022 13:58	R321823
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		16.7	mg/L	1	11/22/2022 23:07	200263
Lithium	NELAP	0.0050		0.0502	mg/L	1	11/28/2022 20:36	200263
Magnesium	NELAP	0.0500		11.6	mg/L	1	11/22/2022 23:07	200263
Potassium	NELAP	0.100		2.46	mg/L	1	11/22/2022 23:07	200263
Sodium	NELAP	0.0500		293	mg/L	1	11/22/2022 23:07	200263
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	J	0.0007	mg/L	5	11/22/2022 15:39	200263
Arsenic	NELAP	0.0010		0.0015	mg/L	5	11/22/2022 15:39	200263
Barium	NELAP	0.0010		0.0195	mg/L	5	11/22/2022 15:39	200263
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 22:50	200263
Boron	NELAP	0.0250		1.47	mg/L	5	11/21/2022 22:50	200263
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 22:50	200263
Chromium	NELAP	0.0015		0.0021	mg/L	5	11/22/2022 15:39	200263
Cobalt	NELAP	0.0010	J	0.0002	mg/L	5	11/22/2022 15:39	200263
Iron	NELAP	0.0250		0.0706	mg/L	5	11/22/2022 15:39	200263
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 15:39	200263
Manganese	NELAP	0.0020		0.0118	mg/L	5	11/22/2022 15:39	200263
Molybdenum	NELAP	0.0015		0.0057	mg/L	5	11/22/2022 15:39	200263
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/21/2022 22:50	200263
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/21/2022 22:50	200263
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/21/2022 11:27	200271



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111237-004  
 Matrix: GROUNDWATER

Work Order: 22111237  
 Report Date: 20-Dec-22  
 Client Sample ID: DUP-02  
 Collection Date: 11/17/2022 11:05

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		255	mg/L	1	11/29/2022 13:57	R321699
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		121	mg/L	1	11/29/2022 13:57	R321699
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		84	mg/L	5	12/01/2022 14:23	R321821
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.69	mg/L	1	11/29/2022 11:01	R321697
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		211	mg/L	5	12/01/2022 14:22	R321823
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		17.6	mg/L	1	11/22/2022 23:11	200263
Lithium	NELAP	0.0050		0.0525	mg/L	1	11/28/2022 20:40	200263
Magnesium	NELAP	0.0500		11.7	mg/L	1	11/22/2022 23:11	200263
Potassium	NELAP	0.100		2.46	mg/L	1	11/22/2022 23:11	200263
Sodium	NELAP	0.0500	S	294	mg/L	1	11/22/2022 23:11	200263
<i>Matrix spike control limits for Na are not applicable due to high sample/spike ratio.</i>								
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	J	0.0007	mg/L	5	11/22/2022 15:56	200263
Arsenic	NELAP	0.0010		0.0015	mg/L	5	11/22/2022 15:56	200263
Barium	NELAP	0.0010		0.0191	mg/L	5	11/22/2022 15:56	200263
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/23/2022 10:03	200263
Boron	NELAP	0.0250		0.984	mg/L	5	11/22/2022 15:56	200263
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 15:56	200263
Chromium	NELAP	0.0015		0.0022	mg/L	5	11/22/2022 15:56	200263
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 15:56	200263
Iron	NELAP	0.0250		0.0692	mg/L	5	11/22/2022 15:56	200263
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 15:56	200263
Manganese	NELAP	0.0020		0.0119	mg/L	5	11/22/2022 15:56	200263
Molybdenum	NELAP	0.0015		0.0053	mg/L	5	11/22/2022 15:56	200263
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 15:56	200263
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/22/2022 15:56	200263
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/21/2022 11:29	200271



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111237-005  
 Matrix: GROUNDWATER

Work Order: 22111237  
 Report Date: 20-Dec-22  
 Client Sample ID: MW-158R  
 Collection Date: 11/17/2022 12:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		266	mg/L	1	11/29/2022 14:14	R321699
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/29/2022 14:14	R321699
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50	H	470	mg/L	2.5	11/30/2022 10:11	R321803
<i>Sample analysis did not meet hold time requirements.</i>								
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		48	mg/L	1	12/01/2022 14:24	R321821
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.39	mg/L	1	11/29/2022 11:02	R321697
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		85	mg/L	5	12/01/2022 14:30	R321823
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100	S	76.7	mg/L	1	11/22/2022 23:22	200264
Lithium	NELAP	0.0050		0.0060	mg/L	1	11/29/2022 13:08	200264
Magnesium	NELAP	0.0500		29.3	mg/L	1	11/22/2022 23:22	200264
Potassium	NELAP	0.100		1.22	mg/L	1	11/22/2022 23:22	200264
Sodium	NELAP	0.0500		51.8	mg/L	1	11/22/2022 23:22	200264
Strontium	NELAP	0.0100		0.251	mg/L	1	11/22/2022 23:22	200264
<i>Matrix spike control limits for Ca are not applicable due to high sample/spike ratio.</i>								
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 2:15	200264
Arsenic	NELAP	0.0010		0.0017	mg/L	5	11/22/2022 2:15	200264
Barium	NELAP	0.0010		0.133	mg/L	5	11/22/2022 2:15	200264
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 2:15	200264
Boron	NELAP	0.0250		0.0347	mg/L	5	11/22/2022 2:15	200264
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 2:15	200264
Chromium	NELAP	0.0015		0.0164	mg/L	5	11/22/2022 18:44	200264
Cobalt	NELAP	0.0010		0.0021	mg/L	5	11/22/2022 2:15	200264
Iron	NELAP	0.0250		3.76	mg/L	5	11/22/2022 18:44	200264
Lead	NELAP	0.0010		0.0033	mg/L	5	11/22/2022 2:15	200264
Manganese	NELAP	0.0020		0.488	mg/L	5	11/22/2022 2:15	200264
Molybdenum	NELAP	0.0015		0.0070	mg/L	5	11/22/2022 2:15	200264
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 2:15	200264
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/22/2022 2:15	200264
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/21/2022 11:32	200271
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/10/2022 0:00	R322555



# Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111237-006  
 Matrix: GROUNDWATER

Work Order: 22111237  
 Report Date: 20-Dec-22  
 Client Sample ID: MW-358  
 Collection Date: 11/17/2022 12:40

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		758	mg/L	1	11/29/2022 14:20	R321699
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	11/29/2022 14:20	R321699
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50	H	2620	mg/L	2.5	11/30/2022 10:11	R321803
<i>Sample analysis did not meet hold time requirements.</i>								
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		101	mg/L	5	12/01/2022 14:32	R321821
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		2.36	mg/L	1	11/29/2022 11:04	R321697
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	80		992	mg/L	20	12/01/2022 14:38	R321823
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		15.8	mg/L	1	11/22/2022 23:48	200264
Lithium	NELAP	0.0050		0.0592	mg/L	1	11/29/2022 12:23	200264
Magnesium	NELAP	0.0500		7.53	mg/L	1	11/22/2022 23:48	200264
Potassium	NELAP	0.100		7.33	mg/L	1	11/22/2022 23:48	200264
Sodium	NELAP	0.0500		991	mg/L	1	11/22/2022 23:48	200264
Strontium	NELAP	0.0100		0.605	mg/L	1	11/22/2022 23:48	200264
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0023	mg/L	5	11/22/2022 1:55	200264
Arsenic	NELAP	0.0010		0.0021	mg/L	5	11/22/2022 1:55	200264
Barium	NELAP	0.0010		0.172	mg/L	5	11/22/2022 1:55	200264
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 1:55	200264
Boron	NELAP	0.0250		1.25	mg/L	5	11/22/2022 1:55	200264
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 1:55	200264
Chromium	NELAP	0.0015		0.0054	mg/L	5	11/22/2022 1:55	200264
Cobalt	NELAP	0.0010		0.0014	mg/L	5	11/22/2022 1:55	200264
Iron	NELAP	0.0250		0.909	mg/L	5	11/22/2022 18:26	200264
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 1:55	200264
Manganese	NELAP	0.0020		0.630	mg/L	5	11/22/2022 1:55	200264
Molybdenum	NELAP	0.0015		0.0475	mg/L	5	11/22/2022 1:55	200264
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 1:55	200264
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/22/2022 1:55	200264
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/21/2022 11:34	200271
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/10/2022 0:00	R322555



# Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111237-007  
 Matrix: GROUNDWATER

Work Order: 22111237  
 Report Date: 20-Dec-22  
 Client Sample ID: MW-258  
 Collection Date: 11/17/2022 13:22

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		593	mg/L	1	11/29/2022 14:30	R321699
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		35	mg/L	1	11/29/2022 14:30	R321699
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50	H	760	mg/L	2.5	11/30/2022 10:12	R321803
<i>Sample analysis did not meet hold time requirements.</i>								
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		12	mg/L	1	12/01/2022 14:40	R321821
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		2.69	mg/L	1	11/29/2022 11:15	R321697
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		54	mg/L	5	12/01/2022 14:46	R321823
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		4.27	mg/L	1	11/22/2022 23:51	200264
Lithium	NELAP	0.0050		0.0497	mg/L	1	11/29/2022 13:20	200264
Magnesium	NELAP	0.0500		1.98	mg/L	1	11/22/2022 23:51	200264
Potassium	NELAP	0.100		1.93	mg/L	1	11/22/2022 23:51	200264
Sodium	NELAP	0.0500		319	mg/L	1	11/22/2022 23:51	200264
Strontium	NELAP	0.0100		0.0908	mg/L	1	11/22/2022 23:51	200264
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	J	0.0010	mg/L	5	11/22/2022 2:02	200264
Arsenic	NELAP	0.0010		0.0015	mg/L	5	11/22/2022 2:02	200264
Barium	NELAP	0.0010		0.0621	mg/L	5	11/22/2022 2:02	200264
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 2:02	200264
Boron	NELAP	0.0250		1.35	mg/L	5	11/22/2022 2:02	200264
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 2:02	200264
Chromium	NELAP	0.0015		0.0062	mg/L	5	11/22/2022 2:02	200264
Cobalt	NELAP	0.0010	J	0.0007	mg/L	5	11/22/2022 2:02	200264
Iron	NELAP	0.0250		1.13	mg/L	5	11/22/2022 18:32	200264
Lead	NELAP	0.0010	J	0.0008	mg/L	5	11/22/2022 2:02	200264
Manganese	NELAP	0.0020		0.0384	mg/L	5	11/22/2022 2:02	200264
Molybdenum	NELAP	0.0015		0.0494	mg/L	5	11/22/2022 2:02	200264
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 2:02	200264
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/22/2022 2:02	200264
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/21/2022 11:41	200271
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/10/2022 0:00	R322555



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111237-008  
 Matrix: GROUNDWATER

Work Order: 22111237  
 Report Date: 20-Dec-22  
 Client Sample ID: MW-304  
 Collection Date: 11/17/2022 14:35

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		818	mg/L	1	11/29/2022 14:39	R321699
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/29/2022 14:39	R321699
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20	H	1490	mg/L	1	11/30/2022 10:12	R321803
<i>Sample analysis did not meet hold time requirements.</i>								
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		218	mg/L	5	12/01/2022 14:48	R321821
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		1.70	mg/L	1	11/29/2022 11:17	R321697
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		175	mg/L	5	12/01/2022 14:49	R321823
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		9.48	mg/L	1	11/22/2022 23:55	200264
Lithium	NELAP	0.0050		0.0635	mg/L	1	11/29/2022 13:24	200264
Magnesium	NELAP	0.0500		4.29	mg/L	1	11/22/2022 23:55	200264
Potassium	NELAP	0.100		1.98	mg/L	1	11/22/2022 23:55	200264
Sodium	NELAP	0.0500		564	mg/L	1	11/22/2022 23:55	200264
Strontium	NELAP	0.0100		0.253	mg/L	1	11/22/2022 23:55	200264
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 2:08	200264
Arsenic	NELAP	0.0010		0.0033	mg/L	5	11/22/2022 2:08	200264
Barium	NELAP	0.0010		0.0209	mg/L	5	11/22/2022 2:08	200264
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 2:08	200264
Boron	NELAP	0.0250		1.91	mg/L	5	11/22/2022 2:08	200264
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 2:08	200264
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/22/2022 2:08	200264
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 2:08	200264
Iron	NELAP	0.025	J	0.025	mg/L	5	11/22/2022 18:38	200264
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 2:08	200264
Manganese	NELAP	0.0020	J	0.0014	mg/L	5	11/22/2022 2:08	200264
Molybdenum	NELAP	0.0015	J	0.0011	mg/L	5	11/22/2022 2:08	200264
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 2:08	200264
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/22/2022 2:08	200264
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/21/2022 11:43	200271
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/10/2022 0:00	R322555





# Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111237-009  
 Matrix: GROUNDWATER

Work Order: 22111237  
 Report Date: 20-Dec-22  
 Client Sample ID: MW-370  
 Collection Date: 11/17/2022 16:30

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		388	mg/L	1	11/29/2022 14:49	R321699
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	11/29/2022 14:49	R321699
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20	H	3200	mg/L	1	11/30/2022 10:12	R321803
<i>Sample analysis did not meet hold time requirements.</i>								
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	200		278	mg/L	20	12/01/2022 15:24	R321821
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		3.06	mg/L	1	11/29/2022 11:19	R321697
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	200	S	1450	mg/L	50	12/05/2022 11:25	R321915
<i>Matrix spike did not recover within control limits. Results verified by reanalysis at dilution.</i>								
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		36.8	mg/L	1	11/22/2022 23:59	200264
Lithium	NELAP	0.0050		0.110	mg/L	1	11/29/2022 13:28	200264
Magnesium	NELAP	0.0500		20.5	mg/L	1	11/22/2022 23:59	200264
Potassium	NELAP	0.100		5.73	mg/L	1	11/22/2022 23:59	200264
Sodium	NELAP	0.0500		1190	mg/L	1	11/22/2022 23:59	200264
Strontium	NELAP	0.0100		2.10	mg/L	1	11/22/2022 23:59	200264
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	J	0.0006	mg/L	5	11/22/2022 3:00	200264
Arsenic	NELAP	0.0010	J	0.0010	mg/L	5	11/22/2022 3:00	200264
Barium	NELAP	0.0010		0.0292	mg/L	5	11/22/2022 3:00	200264
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 3:00	200264
Boron	NELAP	0.0250		1.74	mg/L	5	11/22/2022 3:00	200264
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 3:00	200264
Chromium	NELAP	0.0015		0.0015	mg/L	5	11/22/2022 3:00	200264
Cobalt	NELAP	0.0010	J	0.0004	mg/L	5	11/22/2022 3:00	200264
Iron	NELAP	0.0250		0.505	mg/L	5	11/22/2022 19:24	200264
Lead	NELAP	0.0010	J	0.0006	mg/L	5	11/22/2022 3:00	200264
Manganese	NELAP	0.0020		0.0252	mg/L	5	11/22/2022 3:00	200264
Molybdenum	NELAP	0.0015		0.0356	mg/L	5	11/22/2022 3:00	200264
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 3:00	200264
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/22/2022 3:00	200264
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/21/2022 11:45	200271
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/10/2022 0:00	R322555



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111237-010  
 Matrix: GROUNDWATER

Work Order: 22111237  
 Report Date: 20-Dec-22  
 Client Sample ID: MW-356  
 Collection Date: 11/17/2022 16:23

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		526	mg/L	1	11/29/2022 14:57	R321699
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	11/29/2022 14:57	R321699
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20	H	682	mg/L	1	11/30/2022 11:40	R321803
<i>Sample analysis did not meet hold time requirements.</i>								
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		45	mg/L	1	12/01/2022 15:33	R321821
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		1.92	mg/L	1	11/29/2022 11:21	R321697
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		31	mg/L	1	12/01/2022 15:34	R321823
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		11.7	mg/L	1	11/23/2022 0:03	200264
Lithium	NELAP	0.0050		0.0497	mg/L	1	11/29/2022 13:31	200264
Magnesium	NELAP	0.0500		7.24	mg/L	1	11/23/2022 0:03	200264
Potassium	NELAP	0.100		2.48	mg/L	1	11/23/2022 0:03	200264
Sodium	NELAP	0.0500		255	mg/L	1	11/23/2022 0:03	200264
Strontium	NELAP	0.0100		0.455	mg/L	1	11/23/2022 0:03	200264
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 3:06	200264
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 3:06	200264
Barium	NELAP	0.0010		0.0284	mg/L	5	11/22/2022 3:06	200264
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 3:06	200264
Boron	NELAP	0.0250		1.98	mg/L	5	11/22/2022 3:06	200264
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 3:06	200264
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	11/22/2022 3:06	200264
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 3:06	200264
Iron	NELAP	0.025	J	0.017	mg/L	5	11/22/2022 19:30	200264
Lead	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 3:06	200264
Manganese	NELAP	0.0020		0.0021	mg/L	5	11/22/2022 3:06	200264
Molybdenum	NELAP	0.0015	J	0.0008	mg/L	5	11/22/2022 3:06	200264
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 3:06	200264
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/22/2022 3:06	200264
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/21/2022 11:47	200271
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	12/10/2022 0:00	R322555



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111237-011  
 Matrix: GROUNDWATER

Work Order: 22111237  
 Report Date: 20-Dec-22  
 Client Sample ID: MW-204  
 Collection Date: 11/17/2022 18:29

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		573	mg/L	1	11/29/2022 15:06	R321699
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	11/29/2022 15:06	R321699
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		30	mg/L	1	12/01/2022 15:42	R321821
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		1.36	mg/L	1	11/29/2022 11:22	R321697
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	8		51	mg/L	2	12/01/2022 15:48	R321823
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		18.2	mg/L	1	11/23/2022 0:06	200264
Lithium	NELAP	0.0050		0.0569	mg/L	1	11/29/2022 13:35	200264
Magnesium	NELAP	0.0500		6.86	mg/L	1	11/23/2022 0:06	200264
Potassium	NELAP	0.100		2.18	mg/L	1	11/23/2022 0:06	200264
Sodium	NELAP	0.0500		284	mg/L	1	11/23/2022 0:06	200264
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	J	0.0006	mg/L	5	11/22/2022 3:12	200264
Arsenic	NELAP	0.0010		0.0015	mg/L	5	11/22/2022 3:12	200264
Barium	NELAP	0.0010		0.122	mg/L	5	11/22/2022 3:12	200264
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 3:12	200264
Boron	NELAP	0.0250		1.35	mg/L	5	11/22/2022 3:12	200264
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 3:12	200264
Chromium	NELAP	0.0015		0.0015	mg/L	5	11/22/2022 3:12	200264
Cobalt	NELAP	0.0010	J	0.0002	mg/L	5	11/22/2022 3:12	200264
Iron	NELAP	0.0250		0.261	mg/L	5	11/22/2022 19:36	200264
Lead	NELAP	0.0010		0.0029	mg/L	5	11/22/2022 3:12	200264
Manganese	NELAP	0.0020		0.0783	mg/L	5	11/22/2022 3:12	200264
Molybdenum	NELAP	0.0015		0.0084	mg/L	5	11/22/2022 3:12	200264
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	11/22/2022 3:12	200264
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	11/22/2022 3:12	200264
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	11/21/2022 11:54	200271



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin 845  
 Lab ID: 22111237-012  
 Matrix: AQUEOUS

Work Order: 22111237  
 Report Date: 20-Dec-22  
 Client Sample ID: EB-03  
 Collection Date: 11/17/2022 19:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.10	J	<b>0.039</b>	mg/L	1	11/23/2022 0:10	200264
Lithium	NELAP	0.0050		<b>&lt; 0.0050</b>	mg/L	1	11/29/2022 13:39	200264
Magnesium	NELAP	0.0500		<b>&lt; 0.0500</b>	mg/L	1	11/23/2022 0:10	200264
Potassium	NELAP	0.100		<b>&lt; 0.100</b>	mg/L	1	11/23/2022 0:10	200264
Sodium	NELAP	0.050	J	<b>0.023</b>	mg/L	1	11/23/2022 0:10	200264
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		<b>&lt; 0.0010</b>	mg/L	5	11/22/2022 3:19	200264
Arsenic	NELAP	0.0010		<b>&lt; 0.0010</b>	mg/L	5	11/22/2022 3:19	200264
Barium	NELAP	0.0010		<b>&lt; 0.0010</b>	mg/L	5	11/22/2022 3:19	200264
Beryllium	NELAP	0.0010		<b>&lt; 0.0010</b>	mg/L	5	11/22/2022 3:19	200264
Boron	NELAP	0.0250		<b>&lt; 0.0250</b>	mg/L	5	11/22/2022 3:19	200264
Cadmium	NELAP	0.0010		<b>&lt; 0.0010</b>	mg/L	5	11/22/2022 3:19	200264
Chromium	NELAP	0.0015		<b>&lt; 0.0015</b>	mg/L	5	11/22/2022 3:19	200264
Cobalt	NELAP	0.0010		<b>&lt; 0.0010</b>	mg/L	5	11/22/2022 3:19	200264
Lead	NELAP	0.0010		<b>&lt; 0.0010</b>	mg/L	5	11/22/2022 3:19	200264
Molybdenum	NELAP	0.0015		<b>&lt; 0.0015</b>	mg/L	5	11/22/2022 3:19	200264
Selenium	NELAP	0.0010		<b>&lt; 0.0010</b>	mg/L	5	11/22/2022 3:19	200264
Thallium	NELAP	0.0020		<b>&lt; 0.0020</b>	mg/L	5	11/22/2022 3:19	200264
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		<b>&lt; 0.00020</b>	mg/L	1	11/21/2022 11:57	200271



## Sample Summary

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

**Client:** Ramboll  
**Client Project:** Baldwin 845

**Work Order:** 22111237  
**Report Date:** 20-Dec-22

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
22111237-001	MW-394	Groundwater	3	11/17/2022 9:04
22111237-002	MW-194	Groundwater	3	11/17/2022 10:38
22111237-003	MW-307	Groundwater	2	11/17/2022 10:54
22111237-004	DUP-02	Groundwater	2	11/17/2022 11:05
22111237-005	MW-158R	Groundwater	3	11/17/2022 12:00
22111237-006	MW-358	Groundwater	3	11/17/2022 12:40
22111237-007	MW-258	Groundwater	3	11/17/2022 13:22
22111237-008	MW-304	Groundwater	3	11/17/2022 14:35
22111237-009	MW-370	Groundwater	3	11/17/2022 16:30
22111237-010	MW-356	Groundwater	3	11/17/2022 16:23
22111237-011	MW-204	Groundwater	2	11/17/2022 18:29
22111237-012	EB-03	Aqueous	1	11/17/2022 19:00



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22111237

**Client Project:** Baldwin 845

**Report Date:** 20-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
22111237-001A	MW-394	11/17/2022 9:04	11/17/2022 21:02		
	Standard Methods 2320 B (Total) 1997, 2011				11/29/2022 13:03
	Standard Methods 2320 B 1997, 2011				11/29/2022 13:03
	Standard Methods 2540 C (Total) 1997, 2011				11/30/2022 10:10
	SW-846 9036 (Total)				12/01/2022 13:35
	SW-846 9214 (Total)				11/29/2022 10:55
	SW-846 9251 (Total)				12/05/2022 11:14
22111237-001B	MW-394	11/17/2022 9:04	11/17/2022 21:02		
	See Attached for Subcontracting Analysis				12/10/2022 0:00
22111237-001C	MW-394	11/17/2022 9:04	11/17/2022 21:02		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:12	11/22/2022 23:00
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:12	11/28/2022 20:29
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:12	11/21/2022 22:37
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:12	11/22/2022 15:27
	SW-846 7470A (Total)			11/18/2022 13:19	11/21/2022 11:23
22111237-002A	MW-194	11/17/2022 10:38	11/17/2022 21:02		
	Standard Methods 2320 B (Total) 1997, 2011				11/29/2022 13:12
	Standard Methods 2320 B 1997, 2011				11/29/2022 13:12
	Standard Methods 2540 C (Total) 1997, 2011				11/30/2022 10:11
	SW-846 9036 (Total)				12/01/2022 13:51
	SW-846 9214 (Total)				11/29/2022 10:57
	SW-846 9251 (Total)				12/01/2022 13:45
22111237-002B	MW-194	11/17/2022 10:38	11/17/2022 21:02		
	See Attached for Subcontracting Analysis				12/10/2022 0:00
22111237-002C	MW-194	11/17/2022 10:38	11/17/2022 21:02		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:12	11/22/2022 23:03
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:12	11/28/2022 20:32
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:12	11/21/2022 22:43
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:12	11/22/2022 15:33
	SW-846 7470A (Total)			11/18/2022 13:19	11/21/2022 11:25
22111237-003A	MW-307	11/17/2022 10:54	11/17/2022 21:02		
	Standard Methods 2320 B (Total) 1997, 2011				11/29/2022 13:19
	Standard Methods 2320 B 1997, 2011				11/29/2022 13:19
	SW-846 9036 (Total)				12/01/2022 13:58
	SW-846 9214 (Total)				11/29/2022 10:59
	SW-846 9251 (Total)				12/01/2022 13:58
22111237-003B	MW-307	11/17/2022 10:54	11/17/2022 21:02		



## Dates Report

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

Client: Ramboll

Work Order: 22111237

Client Project: Baldwin 845

Report Date: 20-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:12	11/22/2022 23:07
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:12	11/28/2022 20:36
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:12	11/21/2022 22:50
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:12	11/22/2022 15:39
	SW-846 7470A (Total)			11/18/2022 13:19	11/21/2022 11:27
22111237-004A	DUP-02	11/17/2022 11:05	11/17/2022 21:02		
	Standard Methods 2320 B (Total) 1997, 2011				11/29/2022 13:57
	Standard Methods 2320 B 1997, 2011				11/29/2022 13:57
	SW-846 9036 (Total)				12/01/2022 14:23
	SW-846 9214 (Total)				11/29/2022 11:01
	SW-846 9251 (Total)				12/01/2022 14:22
22111237-004B	DUP-02	11/17/2022 11:05	11/17/2022 21:02		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:12	11/22/2022 23:11
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:12	11/28/2022 20:40
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:12	11/22/2022 15:56
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:12	11/23/2022 10:03
	SW-846 7470A (Total)			11/18/2022 13:19	11/21/2022 11:29
22111237-005A	MW-158R	11/17/2022 12:00	11/17/2022 21:02		
	Standard Methods 2320 B (Total) 1997, 2011				11/29/2022 14:14
	Standard Methods 2320 B 1997, 2011				11/29/2022 14:14
	Standard Methods 2540 C (Total) 1997, 2011				11/30/2022 10:11
	SW-846 9036 (Total)				12/01/2022 14:24
	SW-846 9214 (Total)				11/29/2022 11:02
	SW-846 9251 (Total)				12/01/2022 14:30
22111237-005B	MW-158R	11/17/2022 12:00	11/17/2022 21:02		
	See Attached for Subcontracting Analysis				12/10/2022 0:00
22111237-005C	MW-158R	11/17/2022 12:00	11/17/2022 21:02		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:26	11/22/2022 23:22
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:26	11/29/2022 13:08
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:26	11/22/2022 2:15
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:26	11/22/2022 18:44
	SW-846 7470A (Total)			11/18/2022 13:19	11/21/2022 11:32
22111237-006A	MW-358	11/17/2022 12:40	11/17/2022 21:02		
	Standard Methods 2320 B (Total) 1997, 2011				11/29/2022 14:20
	Standard Methods 2320 B 1997, 2011				11/29/2022 14:20
	Standard Methods 2540 C (Total) 1997, 2011				11/30/2022 10:11
	SW-846 9036 (Total)				12/01/2022 14:32



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22111237

**Client Project:** Baldwin 845

**Report Date:** 20-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
	SW-846 9214 (Total)				11/29/2022 11:04
	SW-846 9251 (Total)				12/01/2022 14:38
22111237-006B	MW-358	11/17/2022 12:40	11/17/2022 21:02		
	See Attached for Subcontracting Analysis				12/10/2022 0:00
22111237-006C	MW-358	11/17/2022 12:40	11/17/2022 21:02		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:26	11/22/2022 23:48
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:26	11/29/2022 12:23
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:26	11/22/2022 1:55
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:26	11/22/2022 18:26
	SW-846 7470A (Total)			11/18/2022 13:19	11/21/2022 11:34
22111237-007A	MW-258	11/17/2022 13:22	11/17/2022 21:02		
	Standard Methods 2320 B (Total) 1997, 2011				11/29/2022 14:30
	Standard Methods 2320 B 1997, 2011				11/29/2022 14:30
	Standard Methods 2540 C (Total) 1997, 2011				11/30/2022 10:12
	SW-846 9036 (Total)				12/01/2022 14:40
	SW-846 9214 (Total)				11/29/2022 11:15
	SW-846 9251 (Total)				12/01/2022 14:46
22111237-007B	MW-258	11/17/2022 13:22	11/17/2022 21:02		
	See Attached for Subcontracting Analysis				12/10/2022 0:00
22111237-007C	MW-258	11/17/2022 13:22	11/17/2022 21:02		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:26	11/22/2022 23:51
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:26	11/29/2022 13:20
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:26	11/22/2022 2:02
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:26	11/22/2022 18:32
	SW-846 7470A (Total)			11/18/2022 13:19	11/21/2022 11:41
22111237-008A	MW-304	11/17/2022 14:35	11/17/2022 21:02		
	Standard Methods 2320 B (Total) 1997, 2011				11/29/2022 14:39
	Standard Methods 2320 B 1997, 2011				11/29/2022 14:39
	Standard Methods 2540 C (Total) 1997, 2011				11/30/2022 10:12
	SW-846 9036 (Total)				12/01/2022 14:48
	SW-846 9214 (Total)				11/29/2022 11:17
	SW-846 9251 (Total)				12/01/2022 14:49
22111237-008B	MW-304	11/17/2022 14:35	11/17/2022 21:02		
	See Attached for Subcontracting Analysis				12/10/2022 0:00
22111237-008C	MW-304	11/17/2022 14:35	11/17/2022 21:02		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:26	11/22/2022 23:55
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:26	11/29/2022 13:24





## Dates Report

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

**Client:** Ramboll

**Work Order:** 22111237

**Client Project:** Baldwin 845

**Report Date:** 20-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:26	11/22/2022 2:08
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:26	11/22/2022 18:38
	SW-846 7470A (Total)			11/18/2022 13:19	11/21/2022 11:43
22111237-009A	MW-370	11/17/2022 16:30	11/17/2022 21:02		
	Standard Methods 2320 B (Total) 1997, 2011				11/29/2022 14:49
	Standard Methods 2320 B 1997, 2011				11/29/2022 14:49
	Standard Methods 2540 C (Total) 1997, 2011				11/30/2022 10:12
	SW-846 9036 (Total)				12/01/2022 15:24
	SW-846 9214 (Total)				11/29/2022 11:19
	SW-846 9251 (Total)				12/05/2022 11:25
22111237-009B	MW-370	11/17/2022 16:30	11/17/2022 21:02		
	See Attached for Subcontracting Analysis				12/10/2022 0:00
22111237-009C	MW-370	11/17/2022 16:30	11/17/2022 21:02		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:26	11/22/2022 23:59
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:26	11/29/2022 13:28
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:26	11/22/2022 3:00
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:26	11/22/2022 19:24
	SW-846 7470A (Total)			11/18/2022 13:19	11/21/2022 11:45
22111237-010A	MW-356	11/17/2022 16:23	11/17/2022 21:02		
	Standard Methods 2320 B (Total) 1997, 2011				11/29/2022 14:57
	Standard Methods 2320 B 1997, 2011				11/29/2022 14:57
	Standard Methods 2540 C (Total) 1997, 2011				11/30/2022 11:40
	SW-846 9036 (Total)				12/01/2022 15:33
	SW-846 9214 (Total)				11/29/2022 11:21
	SW-846 9251 (Total)				12/01/2022 15:34
22111237-010B	MW-356	11/17/2022 16:23	11/17/2022 21:02		
	See Attached for Subcontracting Analysis				12/10/2022 0:00
22111237-010C	MW-356	11/17/2022 16:23	11/17/2022 21:02		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:26	11/23/2022 0:03
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:26	11/29/2022 13:31
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:26	11/22/2022 3:06
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:26	11/22/2022 19:30
	SW-846 7470A (Total)			11/18/2022 13:19	11/21/2022 11:47
22111237-011A	MW-204	11/17/2022 18:29	11/17/2022 21:02		
	Standard Methods 2320 B (Total) 1997, 2011				11/29/2022 15:06
	Standard Methods 2320 B 1997, 2011				11/29/2022 15:06
	SW-846 9036 (Total)				12/01/2022 15:42



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22111237

**Client Project:** Baldwin 845

**Report Date:** 20-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
	SW-846 9214 (Total)				11/29/2022 11:22
	SW-846 9251 (Total)				12/01/2022 15:48
22111237-011B	MW-204	11/17/2022 18:29	11/17/2022 21:02		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:26	11/23/2022 0:06
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:26	11/29/2022 13:35
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:26	11/22/2022 3:12
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:26	11/22/2022 19:36
	SW-846 7470A (Total)			11/18/2022 13:19	11/21/2022 11:54
22111237-012A	EB-03	11/17/2022 19:00	11/17/2022 21:02		
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:26	11/23/2022 0:10
	SW-846 3005A, 6010B, Metals by ICP (Total)			11/18/2022 11:26	11/29/2022 13:39
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			11/18/2022 11:26	11/22/2022 3:19
	SW-846 7470A (Total)			11/18/2022 13:19	11/21/2022 11:57



## Quality Control Results

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

**Client:** Ramboll

**Work Order:** 22111237

**Client Project:** Baldwin 845

**Report Date:** 20-Dec-22

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

Batch R321803		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	11/30/2022
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	11/30/2022
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	11/30/2022

Batch R321803		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	11/30/2022
Total Dissolved Solids		20		988	1000	0	98.8	90	110	11/30/2022
Total Dissolved Solids		20		970	1000	0	97.0	90	110	11/30/2022

Batch R321803		SampType: DUP		Units mg/L						
SampID: 22111237-002ADUP										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20	H	514				530.0	3.07	11/30/2022

### SW-846 9036 (TOTAL)

Batch R321821		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	12/01/2022

Batch R321821		SampType: MBLK		Units mg/Kg						
SampID: MBLK-221128										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		100		< 100	61.40	0	0	-100	100	12/01/2022

Batch R321821		SampType: LCS		Units mg/L						
SampID: ICV/LCS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		20	20.00	0	101.0	90	110	12/01/2022

Batch R321821		SampType: MS		Units mg/L						
SampID: 22111237-001AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		200		693	400.0	336.4	89.3	85	115	12/01/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22111237

Client Project: Baldwin 845

Report Date: 20-Dec-22

### SW-846 9036 (TOTAL)

Batch R321821		SampType: MSD		Units mg/L				RPD Limit: 10			
SampID: 22111237-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		200		<b>710</b>	400.0	336.4	93.4	693.4	2.38	12/01/2022	

Batch R321821		SampType: MS		Units mg/L							
SampID: 22111237-009AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		200		<b>653</b>	400.0	277.7	93.8	85	115	12/01/2022	

Batch R321821		SampType: MSD		Units mg/L				RPD Limit: 10			
SampID: 22111237-009AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		200		<b>657</b>	400.0	277.7	94.8	653.0	0.59	12/01/2022	

Batch R321914		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		<b>&lt; 10</b>	6.140	0	0	-100	100	12/05/2022	

Batch R321914		SampType: MBLK		Units mg/L							
SampID: MBLK-194878											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate	*	10	J	<b>8</b>	8.480	0	100.0	-100	100	12/05/2022	

Batch R321914		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		<b>20</b>	20.00	0	101.2	90	110	12/05/2022	

### SW-846 9214 (TOTAL)

Batch R321697		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		<b>&lt; 0.10</b>	0.0370	0	0	-100	100	11/29/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22111237

Client Project: Baldwin 845

Report Date: 20-Dec-22

### SW-846 9214 (TOTAL)

Batch R321697		SampType: LCS		Units mg/L							
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		<b>0.98</b>	1.000	0	97.6	90	110	11/29/2022	

Batch R321697		SampType: MS		Units mg/L							
SampID: 22111237-006AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		<b>4.66</b>	2.000	2.358	115.2	75	125	11/29/2022	

Batch R321697		SampType: MSD		Units mg/L							
SampID: 22111237-006AMSD											
										RPD Limit: 15	
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		<b>4.62</b>	2.000	2.358	113.0	4.662	0.97	11/29/2022	

Batch R321697		SampType: MS		Units mg/L							
SampID: 22111237-011AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		<b>3.54</b>	2.000	1.365	108.7	75	125	11/29/2022	

Batch R321697		SampType: MSD		Units mg/L							
SampID: 22111237-011AMSD											
										RPD Limit: 15	
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		<b>3.49</b>	2.000	1.365	106.4	3.539	1.28	11/29/2022	

### SW-846 9251 (TOTAL)

Batch R321823		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		<b>&lt; 4</b>	0.5000	0	0	-100	100	12/01/2022	

Batch R321823		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		<b>20</b>	20.00	0	99.1	90	110	12/01/2022	



## Quality Control Results

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Client: Ramboll

Work Order: 22111237

Client Project: Baldwin 845

Report Date: 20-Dec-22

### SW-846 9251 (TOTAL)

Batch R321915		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	12/05/2022	

Batch R321915		SampType: MBLK		Units mg/L							
SampID: MBLK-194878											
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	12/05/2022	

Batch R321915		SampType: LCS		Units mg/L							
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		20	20.00	0	100.3	90	110	12/05/2022	

Batch R321915		SampType: MS		Units mg/L							
SampID: 22111237-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		200		1490	1000	576.4	91.2	85	115	12/05/2022	

Batch R321915		SampType: MSD		Units mg/L							
SampID: 22111237-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		200		1470	1000	576.4	89.4	1489	1.25	12/05/2022	

Batch R321915		SampType: MS		Units mg/L							
SampID: 22111237-009AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		200		2310	1000	1452	85.5	85	115	12/05/2022	

Batch R321915		SampType: MSD		Units mg/L							
SampID: 22111237-009AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		200	S	2260	1000	1452	80.4	2307	2.23	12/05/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22111237

Client Project: Baldwin 845

Report Date: 20-Dec-22

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

Batch 200263      SampType: MBLK      Units mg/L

SampleID: MBLK-200263

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic		0.0250		< 0.0250	0.0087	0	0	-100	100	11/22/2022
Barium		0.0025		< 0.0025	0.0007	0	0	-100	100	11/22/2022
Beryllium		0.0005		< 0.0005	0.0002	0	0	-100	100	11/22/2022
Boron		0.0200		< 0.0200	0.0090	0	0	-100	100	11/28/2022
Cadmium		0.0020		< 0.0020	0.0005	0	0	-100	100	11/22/2022
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	11/28/2022
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	11/22/2022
Chromium		0.0050		< 0.0050	0.0028	0	0	-100	100	11/22/2022
Cobalt		0.0050		< 0.0050	0.0020	0	0	-100	100	11/22/2022
Iron		0.0400		< 0.0400	0.0200	0	0	-100	100	11/22/2022
Lead		0.0150		< 0.0150	0.0040	0	0	-100	100	11/22/2022
Lithium	*	0.0050		< 0.0050	0.0019	0	0	-100	100	11/28/2022
Lithium	*	0.0050		< 0.0050	0.0019	0	0	-100	100	11/22/2022
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	11/28/2022
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	11/22/2022
Manganese		0.0070		< 0.0070	0.0025	0	0	-100	100	11/22/2022
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	11/28/2022
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	11/22/2022
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	11/28/2022
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	11/22/2022
Strontium	*	0.0100		< 0.0100	0.0013	0	0	-100	100	11/28/2022
Strontium	*	0.0100		< 0.0100	0.0013	0	0	-100	100	11/22/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22111237

Client Project: Baldwin 845

Report Date: 20-Dec-22

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

Batch 200263      SampType: LCS      Units mg/L

SampID: LCS-200263

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic		0.0250		<b>0.524</b>	0.5000	0	104.7	85	115	11/22/2022
Barium		0.0025		<b>2.05</b>	2.000	0	102.5	85	115	11/22/2022
Beryllium		0.0005		<b>0.0510</b>	0.0500	0	102.0	85	115	11/22/2022
Boron		0.0200		<b>0.510</b>	0.5000	0	102.1	85	115	11/28/2022
Cadmium		0.0020		<b>0.0503</b>	0.0500	0	100.6	85	115	11/22/2022
Calcium		0.100		<b>2.65</b>	2.500	0	106.2	85	115	11/22/2022
Calcium		0.100		<b>2.68</b>	2.500	0	107.0	85	115	11/28/2022
Chromium		0.0050		<b>0.202</b>	0.2000	0	100.8	85	115	11/22/2022
Cobalt		0.0050		<b>0.504</b>	0.5000	0	100.8	85	115	11/22/2022
Iron		0.0400		<b>2.04</b>	2.000	0	101.9	85	115	11/22/2022
Lead		0.0150		<b>0.495</b>	0.5000	0	99.0	85	115	11/22/2022
Lithium	*	0.0050		<b>0.537</b>	0.5000	0	107.3	85	115	11/22/2022
Lithium	*	0.0050		<b>0.545</b>	0.5000	0	108.9	85	115	11/28/2022
Magnesium		0.0500		<b>2.63</b>	2.500	0	105.1	85	115	11/22/2022
Magnesium		0.0500		<b>2.65</b>	2.500	0	106.1	85	115	11/28/2022
Manganese		0.0070		<b>0.500</b>	0.5000	0	100.0	85	115	11/22/2022
Potassium		0.100		<b>2.49</b>	2.500	0	99.4	85	115	11/22/2022
Potassium		0.100		<b>2.54</b>	2.500	0	101.8	85	115	11/28/2022
Sodium		0.0500		<b>2.49</b>	2.500	0	99.7	85	115	11/28/2022
Sodium		0.0500		<b>2.43</b>	2.500	0	97.2	85	115	11/22/2022
Strontium	*	0.0100		<b>0.108</b>	0.1000	0	108.1	85	115	11/28/2022
Strontium	*	0.0100		<b>0.104</b>	0.1000	0	104.2	85	115	11/22/2022

Batch 200263      SampType: MS      Units mg/L

SampID: 22111237-004BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		<b>20.2</b>	2.500	17.60	102.8	75	125	11/22/2022
Lithium		0.0050		<b>0.600</b>	0.5000	0.05250	109.4	75	125	11/28/2022
Magnesium		0.0500		<b>14.1</b>	2.500	11.66	99.2	75	125	11/22/2022
Potassium		0.100		<b>5.15</b>	2.500	2.456	107.6	75	125	11/22/2022
Sodium		0.0500	S	<b>297</b>	2.500	293.5	132.0	75	125	11/22/2022





## Quality Control Results

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

Client: Ramboll

Work Order: 22111237

Client Project: Baldwin 845

Report Date: 20-Dec-22

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

Batch 200263		SampType: MSD		Units mg/L				RPD Limit: 20			Date Analyzed
SampID: 22111237-004BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100		<b>20.0</b>	2.500	17.60	97.6	20.17	0.65	11/22/2022	
Lithium		0.0050		<b>0.594</b>	0.5000	0.05250	108.2	0.5996	1.01	11/28/2022	
Magnesium		0.0500		<b>14.1</b>	2.500	11.66	96.4	14.14	0.50	11/22/2022	
Potassium		0.100		<b>5.07</b>	2.500	2.456	104.6	5.146	1.47	11/22/2022	
Sodium		0.0500	S	<b>295</b>	2.500	293.5	52.0	296.8	0.68	11/22/2022	

Batch 200264		SampType: MBLK		Units mg/L						Date Analyzed
SampID: MBLK-200264										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic		0.0250		< <b>0.0250</b>	0.0087	0	0	-100	100	11/22/2022
Barium		0.0025		< <b>0.0025</b>	0.0007	0	0	-100	100	11/22/2022
Beryllium		0.0005		< <b>0.0005</b>	0.0002	0	0	-100	100	11/22/2022
Cadmium		0.0020		< <b>0.0020</b>	0.0005	0	0	-100	100	11/22/2022
Calcium		0.100		< <b>0.100</b>	0.0350	0	0	-100	100	11/22/2022
Chromium		0.0050		< <b>0.0050</b>	0.0028	0	0	-100	100	11/22/2022
Cobalt		0.0050		< <b>0.0050</b>	0.0020	0	0	-100	100	11/22/2022
Iron		0.0400		< <b>0.0400</b>	0.0200	0	0	-100	100	11/22/2022
Lead		0.0150		< <b>0.0150</b>	0.0040	0	0	-100	100	11/22/2022
Lithium	*	0.0050		< <b>0.0050</b>	0.0019	0	0	-100	100	11/22/2022
Magnesium		0.0500		< <b>0.0500</b>	0.0055	0	0	-100	100	11/22/2022
Manganese		0.0070		< <b>0.0070</b>	0.0025	0	0	-100	100	11/22/2022
Potassium		0.100		< <b>0.100</b>	0.0400	0	0	-100	100	11/22/2022
Sodium		0.0500		< <b>0.0500</b>	0.0180	0	0	-100	100	11/22/2022
Strontium	*	0.0100		< <b>0.0100</b>	0.0013	0	0	-100	100	11/22/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22111237

Client Project: Baldwin 845

Report Date: 20-Dec-22

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

Batch 200264      SampType: LCS      Units mg/L  
 SampID: LCS-200264

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic		0.0250		<b>0.518</b>	0.5000	0	103.6	85	115	11/22/2022
Barium		0.0025		<b>2.04</b>	2.000	0	101.8	85	115	11/22/2022
Beryllium		0.0005		<b>0.0498</b>	0.0500	0	99.6	85	115	11/22/2022
Boron		0.0200		<b>0.532</b>	0.5000	0	106.4	85	115	11/28/2022
Cadmium		0.0020		<b>0.0488</b>	0.0500	0	97.6	85	115	11/22/2022
Calcium		0.100		<b>2.50</b>	2.500	0	100.0	85	115	11/22/2022
Chromium		0.0050		<b>0.198</b>	0.2000	0	98.9	85	115	11/22/2022
Cobalt		0.0050		<b>0.499</b>	0.5000	0	99.7	85	115	11/22/2022
Iron		0.0400		<b>1.94</b>	2.000	0	96.8	85	115	11/22/2022
Lead		0.0150		<b>0.489</b>	0.5000	0	97.8	85	115	11/22/2022
Lithium	*	0.0050		<b>0.529</b>	0.5000	0	105.9	85	115	11/22/2022
Magnesium		0.0500		<b>2.55</b>	2.500	0	101.9	85	115	11/22/2022
Manganese		0.0070		<b>0.493</b>	0.5000	0	98.5	85	115	11/22/2022
Potassium		0.100		<b>2.39</b>	2.500	0	95.5	85	115	11/22/2022
Sodium		0.0500		<b>2.32</b>	2.500	0	92.7	85	115	11/22/2022
Strontium	*	0.0100		<b>0.0976</b>	0.1000	0	97.6	85	115	11/22/2022

Batch 200264      SampType: MS      Units mg/L  
 SampID: 22111237-005CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	<b>80.1</b>	2.500	76.73	133.2	75	125	11/22/2022
Lithium		0.0050		<b>0.556</b>	0.5000	0.006000	109.9	75	125	11/29/2022
Magnesium		0.0500		<b>32.2</b>	2.500	29.32	113.2	75	125	11/22/2022
Potassium		0.100		<b>3.66</b>	2.500	1.219	97.5	75	125	11/22/2022
Sodium		0.0500		<b>54.6</b>	2.500	51.76	113.6	75	125	11/22/2022
Strontium		0.0100		<b>0.355</b>	0.1000	0.2513	103.5	75	125	11/22/2022

Batch 200264      SampType: MSD      Units mg/L  
 SampID: 22111237-005CMSD

RPD Limit: 20

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100	S	<b>79.9</b>	2.500	76.73	128.4	80.06	0.15	11/22/2022
Lithium		0.0050		<b>0.554</b>	0.5000	0.006000	109.6	0.5556	0.29	11/29/2022
Magnesium		0.0500		<b>32.0</b>	2.500	29.32	107.6	32.15	0.44	11/22/2022
Potassium		0.100		<b>3.67</b>	2.500	1.219	97.9	3.657	0.25	11/22/2022
Sodium		0.0500		<b>54.5</b>	2.500	51.76	110.0	54.60	0.16	11/22/2022
Strontium		0.0100		<b>0.354</b>	0.1000	0.2513	102.7	0.3548	0.23	11/22/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22111237

Client Project: Baldwin 845

Report Date: 20-Dec-22

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

Batch 200263      SampType: MBLK      Units mg/L

SampID: MBLK-200263

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	11/21/2022
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	11/21/2022
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	11/21/2022
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	11/21/2022
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	11/21/2022
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	11/21/2022
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	11/21/2022
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	11/21/2022
Iron		0.0250		< 0.0250	0.0115	0	0	-100	100	11/22/2022
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	11/21/2022
Manganese		0.0020		< 0.0020	0.0008	0	0	-100	100	11/21/2022
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	11/21/2022
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	11/21/2022
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	11/21/2022

Batch 200263      SampType: LCS      Units mg/L

SampID: LCS-200263

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.462	0.5000	0	92.3	80	120	11/22/2022
Arsenic		0.0010		0.486	0.5000	0	97.2	80	120	11/22/2022
Barium		0.0010		1.93	2.000	0	96.7	80	120	11/22/2022
Beryllium		0.0010		0.0599	0.0500	0	119.7	80	120	11/21/2022
Boron		0.0250		0.587	0.5000	0	117.4	80	120	11/21/2022
Cadmium		0.0010		0.0594	0.0500	0	118.8	80	120	11/21/2022
Chromium		0.0015		0.189	0.2000	0	94.4	80	120	11/22/2022
Cobalt		0.0010		0.477	0.5000	0	95.4	80	120	11/22/2022
Iron		0.0250		1.87	2.000	0	93.7	80	120	11/22/2022
Lead		0.0010		0.475	0.5000	0	94.9	80	120	11/22/2022
Manganese		0.0020		0.465	0.5000	0	93.0	80	120	11/22/2022
Molybdenum		0.0015		0.452	0.5000	0	90.3	80	120	11/22/2022
Selenium		0.0010		0.573	0.5000	0	114.5	80	120	11/21/2022
Thallium		0.0020		0.291	0.2500	0	116.4	80	120	11/21/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22111237

Client Project: Baldwin 845

Report Date: 20-Dec-22

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

Batch 200263		SampType: MS		Units mg/L							Date Analyzed
SampID: 22111237-004BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		<b>0.457</b>	0.5000	0.0006831	91.3	75	125	11/22/2022	
Arsenic		0.0010		<b>0.474</b>	0.5000	0.001534	94.4	75	125	11/22/2022	
Barium		0.0010		<b>1.84</b>	2.000	0.01906	91.1	75	125	11/22/2022	
Beryllium		0.0010		<b>0.0427</b>	0.0500	0	85.4	75	125	11/23/2022	
Boron		0.0250		<b>1.48</b>	0.5000	0.9840	98.8	75	125	11/22/2022	
Cadmium		0.0010		<b>0.0432</b>	0.0500	0	86.5	75	125	11/22/2022	
Chromium		0.0015		<b>0.177</b>	0.2000	0.002181	87.7	75	125	11/22/2022	
Cobalt		0.0010		<b>0.450</b>	0.5000	0	90.1	75	125	11/22/2022	
Iron		0.0250		<b>1.83</b>	2.000	0.06925	88.1	75	125	11/22/2022	
Lead		0.0010		<b>0.464</b>	0.5000	0	92.8	75	125	11/22/2022	
Manganese		0.0020		<b>0.450</b>	0.5000	0.01193	87.5	75	125	11/22/2022	
Molybdenum		0.0015		<b>0.450</b>	0.5000	0.005325	88.9	75	125	11/22/2022	
Selenium		0.0010		<b>0.427</b>	0.5000	0	85.4	75	125	11/22/2022	
Thallium		0.0020		<b>0.223</b>	0.2500	0	89.1	75	125	11/22/2022	

Batch 200263		SampType: MSD		Units mg/L							RPD Limit: 20	Date Analyzed
SampID: 22111237-004BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Antimony		0.0010		<b>0.486</b>	0.5000	0.0006831	97.0	0.4573	6.00	11/22/2022		
Arsenic		0.0010		<b>0.506</b>	0.5000	0.001534	100.8	0.4737	6.53	11/22/2022		
Barium		0.0010		<b>1.96</b>	2.000	0.01906	97.0	1.841	6.20	11/22/2022		
Beryllium		0.0010		<b>0.0401</b>	0.0500	0	80.2	0.04268	6.27	11/23/2022		
Boron		0.0250		<b>1.54</b>	0.5000	0.9840	110.4	1.478	3.86	11/22/2022		
Cadmium		0.0010		<b>0.0463</b>	0.0500	0	92.5	0.04324	6.79	11/22/2022		
Chromium		0.0015		<b>0.187</b>	0.2000	0.002181	92.4	0.1775	5.20	11/22/2022		
Cobalt		0.0010		<b>0.477</b>	0.5000	0	95.5	0.4503	5.83	11/22/2022		
Iron		0.0250		<b>1.89</b>	2.000	0.06925	91.2	1.832	3.31	11/22/2022		
Lead		0.0010		<b>0.491</b>	0.5000	0	98.2	0.4639	5.64	11/22/2022		
Manganese		0.0020		<b>0.468</b>	0.5000	0.01193	91.3	0.4495	4.11	11/22/2022		
Molybdenum		0.0015		<b>0.488</b>	0.5000	0.005325	96.6	0.4500	8.15	11/22/2022		
Selenium		0.0010		<b>0.453</b>	0.5000	0	90.5	0.4269	5.84	11/22/2022		
Thallium		0.0020		<b>0.236</b>	0.2500	0	94.4	0.2227	5.82	11/22/2022		



## Quality Control Results

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

Client: Ramboll

Work Order: 22111237

Client Project: Baldwin 845

Report Date: 20-Dec-22

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

Batch 200264    SampType: MBLK    Units mg/L

SampID: MBLK-200264

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	11/22/2022
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	11/22/2022
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	11/22/2022
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	11/22/2022
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	11/22/2022
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	11/22/2022
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	11/22/2022
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	11/22/2022
Iron		0.0250		< 0.0250	0.0115	0	0	-100	100	11/22/2022
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	11/22/2022
Manganese		0.0020		< 0.0020	0.0008	0	0	-100	100	11/22/2022
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	11/22/2022
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	11/22/2022
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	11/22/2022

Batch 200264    SampType: LCS    Units mg/L

SampID: LCS-200264

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.518	0.5000	0	103.5	80	120	11/22/2022
Arsenic		0.0010		0.531	0.5000	0	106.2	80	120	11/22/2022
Barium		0.0010		2.12	2.000	0	106.1	80	120	11/22/2022
Beryllium		0.0010		0.0493	0.0500	0	98.6	80	120	11/22/2022
Boron		0.0250		0.501	0.5000	0	100.2	80	120	11/22/2022
Cadmium		0.0010		0.0484	0.0500	0	96.8	80	120	11/22/2022
Chromium		0.0015		0.201	0.2000	0	100.6	80	120	11/22/2022
Cobalt		0.0010		0.501	0.5000	0	100.2	80	120	11/22/2022
Iron		0.0250		1.98	2.000	0	98.8	80	120	11/22/2022
Lead		0.0010		0.508	0.5000	0	101.6	80	120	11/22/2022
Manganese		0.0020		0.503	0.5000	0	100.6	80	120	11/22/2022
Molybdenum		0.0015		0.488	0.5000	0	97.7	80	120	11/22/2022
Selenium		0.0010		0.490	0.5000	0	98.1	80	120	11/22/2022
Thallium		0.0020		0.248	0.2500	0	99.3	80	120	11/22/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22111237

Client Project: Baldwin 845

Report Date: 20-Dec-22

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

Batch 200264 SampType: MS Units mg/L

SampID: 22111237-005CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		<b>0.499</b>	0.5000	0	99.7	75	125	11/22/2022
Arsenic		0.0010		<b>0.530</b>	0.5000	0.001743	105.6	75	125	11/22/2022
Barium		0.0010		<b>2.21</b>	2.000	0.1334	103.9	75	125	11/22/2022
Beryllium		0.0010		<b>0.0501</b>	0.0500	0	100.2	75	125	11/22/2022
Boron		0.0250		<b>0.534</b>	0.5000	0.03470	99.8	75	125	11/22/2022
Cadmium		0.0010		<b>0.0475</b>	0.0500	0	95.1	75	125	11/22/2022
Chromium		0.0015		<b>0.213</b>	0.2000	0.01636	98.5	75	125	11/22/2022
Cobalt		0.0010		<b>0.484</b>	0.5000	0.002104	96.3	75	125	11/22/2022
Iron		0.0250		<b>6.10</b>	2.000	3.762	116.7	75	125	11/22/2022
Lead		0.0010		<b>0.509</b>	0.5000	0.003332	101.1	75	125	11/22/2022
Manganese		0.0020		<b>0.942</b>	0.5000	0.4877	90.8	75	125	11/22/2022
Molybdenum		0.0015		<b>0.498</b>	0.5000	0.006990	98.2	75	125	11/22/2022
Selenium		0.0010		<b>0.480</b>	0.5000	0	96.0	75	125	11/22/2022
Thallium		0.0020		<b>0.246</b>	0.2500	0	98.5	75	125	11/22/2022

Batch 200264 SampType: MSD Units mg/L

RPD Limit: 20

SampID: 22111237-005CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		<b>0.498</b>	0.5000	0	99.6	0.4985	0.15	11/22/2022
Arsenic		0.0010		<b>0.543</b>	0.5000	0.001743	108.2	0.5297	2.47	11/22/2022
Barium		0.0010		<b>2.20</b>	2.000	0.1334	103.1	2.211	0.67	11/22/2022
Beryllium		0.0010		<b>0.0473</b>	0.0500	0	94.6	0.05009	5.71	11/22/2022
Boron		0.0250		<b>0.527</b>	0.5000	0.03470	98.5	0.5340	1.29	11/22/2022
Cadmium		0.0010		<b>0.0482</b>	0.0500	0	96.3	0.04753	1.34	11/22/2022
Chromium		0.0015		<b>0.213</b>	0.2000	0.01636	98.1	0.2134	0.38	11/22/2022
Cobalt		0.0010		<b>0.489</b>	0.5000	0.002104	97.5	0.4837	1.16	11/22/2022
Iron		0.0250		<b>6.03</b>	2.000	3.762	113.6	6.097	1.02	11/22/2022
Lead		0.0010		<b>0.507</b>	0.5000	0.003332	100.7	0.5088	0.42	11/22/2022
Manganese		0.0020		<b>0.954</b>	0.5000	0.4877	93.2	0.9418	1.24	11/22/2022
Molybdenum		0.0015		<b>0.505</b>	0.5000	0.006990	99.6	0.4978	1.47	11/22/2022
Selenium		0.0010		<b>0.493</b>	0.5000	0	98.6	0.4799	2.74	11/22/2022
Thallium		0.0020		<b>0.247</b>	0.2500	0	98.9	0.2462	0.42	11/22/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22111237

Client Project: Baldwin 845

Report Date: 20-Dec-22

### SW-846 7470A (TOTAL)

Batch 200271		SampType: MBLK		Units mg/L							
SampID: MBLK-200271											
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	11/21/2022	

Batch 200271		SampType: LCS		Units mg/L							
SampID: LCS-200271											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00560	0.0050	0	112.0	85	115	11/21/2022	

Batch 200271		SampType: MS		Units mg/L							
SampID: 22111237-010CMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		0.00533	0.0050	0	106.6	75	125	11/21/2022	

Batch 200271		SampType: MSD		Units mg/L							
SampID: 22111237-010CMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		0.00507	0.0050	0	101.4	0.005330	5.01	11/21/2022	



# Receiving Check List

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

Client: Ramboll

Work Order: 22111237

Client Project: Baldwin 845

Report Date: 20-Dec-22

Carrier: Andrew Hardwick

Received By: SW

Completed by:

Reviewed by:

On:

18-Nov-22

Timothy W. Mathis

On:

18-Nov-22

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

- |   |   |   |  |                                  |
|---|---|---|--|----------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             | Not Present <input type="checkbox"/>   | Temp °C <b>3.8</b>               |
| Type of thermal preservation?                           | None <input type="checkbox"/>           | Ice <input checked="" type="checkbox"/> | Blue Ice <input type="checkbox"/>      | Dry Ice <input type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Reported field parameters measured:                     | Field <input type="checkbox"/>          | Lab <input type="checkbox"/>            | NA <input checked="" type="checkbox"/> |                                  |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |

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

- |   |                              |  |   |
|---|------------------------------|--|---|
| Water – at least one vial per sample has zero headspace?  | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | No VOA vials <input checked="" type="checkbox"/>      |
| Water - TOX containers have zero headspace?               | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | No TOX containers <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt?                       | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | NA <input type="checkbox"/>                           |
| NPDES/CWA TCN interferences checked/treated in the field? | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | NA <input checked="" type="checkbox"/>                |

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

pH strip #83856 LM. - TMathis - 11/18/2022 11:19:52 AM

Additional HNO3 (86511) was needed in all metals and Ra226/228 containers upon arrival at the laboratory. - LM/TMathis - 11/18/2022 11:40:58 AM





## TEKLAB, Inc.

Sample Delivery Group: L1560335  
Samples Received: 11/21/2022  
Project Number: 22111237  
Description:  
Site: 001  
Report To: Elizabeth Hurley  
5445 Horseshoe Lake Road  
Collinsville, IL 62234

Entire Report Reviewed By:












Mark W. Beasley  
Project Manager

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

Pace Analytical National

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

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# SAMPLE SUMMARY

## 22111237-001 L1560335-01 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/17/22 09:04  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964531	1	11/28/22 15:17	12/10/22 10:28	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966873	1	12/06/22 15:25	12/10/22 12:14	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966873	1	12/06/22 15:25	12/10/22 12:14	RGT	Mt. Juliet, TN



## 22111237-002 L1560335-02 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/17/22 10:38  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964531	1	11/28/22 15:17	12/10/22 10:28	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966873	1	12/06/22 15:25	12/10/22 12:14	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966873	1	12/06/22 15:25	12/10/22 12:14	RGT	Mt. Juliet, TN

## 22111237-005 L1560335-03 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/17/22 12:00  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964531	1	11/28/22 15:17	12/10/22 10:28	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966873	1	12/06/22 15:25	12/10/22 12:14	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966873	1	12/06/22 15:25	12/10/22 12:14	RGT	Mt. Juliet, TN

## 22111237-006 L1560335-04 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/17/22 12:40  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964531	1	11/28/22 15:17	12/10/22 10:28	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966873	1	12/06/22 15:25	12/10/22 12:14	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966873	1	12/06/22 15:25	12/10/22 12:14	RGT	Mt. Juliet, TN

## 22111237-007 L1560335-05 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/17/22 13:22  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964531	1	11/28/22 15:17	12/10/22 10:28	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966873	1	12/06/22 15:25	12/10/22 12:14	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966873	1	12/06/22 15:25	12/10/22 12:14	RGT	Mt. Juliet, TN

## 22111237-008 L1560335-06 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/17/22 14:35  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964531	1	11/28/22 15:17	12/10/22 10:28	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966873	1	12/06/22 15:25	12/10/22 12:14	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966873	1	12/06/22 15:25	12/10/22 12:14	RGT	Mt. Juliet, TN

# SAMPLE SUMMARY

## 22111237-009 L1560335-07 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/17/22 16:30  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964531	1	11/28/22 15:17	12/10/22 10:28	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966873	1	12/06/22 15:25	12/10/22 12:14	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966873	1	12/06/22 15:25	12/10/22 12:14	RGT	Mt. Juliet, TN

1  
Cp

2  
Tc

3  
Ss

## 22111237-010 L1560335-08 Non-Potable Water

Collected by  
Collected date/time  
Received date/time

11/17/22 16:23  
11/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1964531	1	11/28/22 15:17	12/10/22 10:28	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1966873	1	12/06/22 15:25	12/10/22 12:14	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1966873	1	12/06/22 15:25	12/10/22 12:14	RGT	Mt. Juliet, TN

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

# CASE NARRATIVE

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



Mark W. Beasley  
Project Manager

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.250	J	0.213	0.374	12/10/2022 10:28	<a href="#">WG1964531</a>
(T) Barium	88.9			30.0-143	12/10/2022 10:28	<a href="#">WG1964531</a>
(T) Yttrium	97.2			30.0-136	12/10/2022 10:28	<a href="#">WG1964531</a>

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.599		0.313	0.440	12/10/2022 12:14	<a href="#">WG1966873</a>

<sup>4</sup>Cn

<sup>5</sup>Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.349		0.229	0.231	12/10/2022 12:14	<a href="#">WG1966873</a>
(T) Barium-133	102			30.0-143	12/10/2022 12:14	<a href="#">WG1966873</a>

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.226	<u>U</u>	0.224	0.409	12/10/2022 10:28	<a href="#">WG1964531</a>
(T) Barium	87.8			30.0-143	12/10/2022 10:28	<a href="#">WG1964531</a>
(T) Yttrium	110			30.0-136	12/10/2022 10:28	<a href="#">WG1964531</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.203	<u>J</u>	0.308	0.496	12/10/2022 12:14	<a href="#">WG1966873</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.203	<u>J</u>	0.212	0.280	12/10/2022 12:14	<a href="#">WG1966873</a>
(T) Barium-133	100			30.0-143	12/10/2022 12:14	<a href="#">WG1966873</a>

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



Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.142	<u>U</u>	0.286	0.496	12/10/2022 10:28	<a href="#">WG1964531</a>
(T) Barium	86.7			30.0-143	12/10/2022 10:28	<a href="#">WG1964531</a>
(T) Yttrium	102			30.0-136	12/10/2022 10:28	<a href="#">WG1964531</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.449	<u>J</u>	0.423	0.643	12/10/2022 12:14	<a href="#">WG1966873</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.307	<u>J</u>	0.311	0.409	12/10/2022 12:14	<a href="#">WG1966873</a>
(T) Barium-133	91.4			30.0-143	12/10/2022 12:14	<a href="#">WG1966873</a>

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

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.08		0.314	0.516	12/10/2022 10:28	<a href="#">WG1964531</a>
(T) Barium	85.4			30.0-143	12/10/2022 10:28	<a href="#">WG1964531</a>
(T) Yttrium	89.2			30.0-136	12/10/2022 10:28	<a href="#">WG1964531</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.28		0.391	0.606	12/10/2022 12:14	<a href="#">WG1966873</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.207	J	0.233	0.317	12/10/2022 12:14	<a href="#">WG1966873</a>
(T) Barium-133	97.0			30.0-143	12/10/2022 12:14	<a href="#">WG1966873</a>

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

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.0130	<u>U</u>	0.261	0.457	12/10/2022 10:28	<a href="#">WG1964531</a>
(T) Barium	92.5			30.0-143	12/10/2022 10:28	<a href="#">WG1964531</a>
(T) Yttrium	103			30.0-136	12/10/2022 10:28	<a href="#">WG1964531</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.218	<u>J</u>	0.359	0.566	12/10/2022 12:14	<a href="#">WG1966873</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.218	<u>J</u>	0.246	0.334	12/10/2022 12:14	<a href="#">WG1966873</a>
(T) Barium-133	91.9			30.0-143	12/10/2022 12:14	<a href="#">WG1966873</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.741	<u>U</u>	0.289	0.528	12/10/2022 10:28	<a href="#">WG1964531</a>
(T) Barium	85.7			30.0-143	12/10/2022 10:28	<a href="#">WG1964531</a>
(T) Yttrium	95.9			30.0-136	12/10/2022 10:28	<a href="#">WG1964531</a>

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.217	<u>U</u>	0.355	0.587	12/10/2022 12:14	<a href="#">WG1966873</a>

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.217	<u>J</u>	0.206	0.257	12/10/2022 12:14	<a href="#">WG1966873</a>
(T) Barium-133	95.2			30.0-143	12/10/2022 12:14	<a href="#">WG1966873</a>

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.965		0.268	0.437	12/10/2022 10:28	<a href="#">WG1964531</a>
(T) Barium	98.1			30.0-143	12/10/2022 10:28	<a href="#">WG1964531</a>
(T) Yttrium	102			30.0-136	12/10/2022 10:28	<a href="#">WG1964531</a>

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.31		0.451	0.654	12/10/2022 12:14	<a href="#">WG1966873</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.342	J	0.363	0.486	12/10/2022 12:14	<a href="#">WG1966873</a>
(T) Barium-133	94.6			30.0-143	12/10/2022 12:14	<a href="#">WG1966873</a>

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

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.540		0.312	0.529	12/10/2022 10:28	<a href="#">WG1964531</a>
(T) Barium	85.8			30.0-143	12/10/2022 10:28	<a href="#">WG1964531</a>
(T) Yttrium	111			30.0-136	12/10/2022 10:28	<a href="#">WG1964531</a>

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

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.651		0.364	0.602	12/10/2022 12:14	<a href="#">WG1966873</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.111	J	0.187	0.287	12/10/2022 12:14	<a href="#">WG1966873</a>
(T) Barium-133	93.9			30.0-143	12/10/2022 12:14	<a href="#">WG1966873</a>

Method Blank (MB)

(MB) R3870478-1 12/10/22 10:28

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-228	0.397		0.154	0.261
(T) Barium	93.7		93.7	
(T) Yttrium	110		110	

L1554846-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1554846-03 12/10/22 10:28 • (DUP) R3870478-5 12/10/22 10:28

Analyte	Original Result pCi/l	Original Uncertainty + / -	Original MDA pCi/l	DUP Result pCi/l	DUP Uncertainty + / -	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	-0.323	0.219	0.407	-0.0357	0.349	0.407	1	0.000	0.696	<u>U</u>	20	3
(T) Barium	83.8			86.1	86.1							
(T) Yttrium	97.3			106	106							

Laboratory Control Sample (LCS)

(LCS) R3870478-2 12/10/22 10:28

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.96	99.3	80.0-120	
(T) Barium			89.0		
(T) Yttrium			103		

L1560368-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1560368-08 12/10/22 10:28 • (MS) R3870478-3 12/10/22 10:28 • (MSD) R3870478-4 12/10/22 10:28

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	10.0	-0.577	10.5	10.0	105	100	1	70.0-130			4.29		20
(T) Barium		86.0			86.0	97.1							
(T) Yttrium		110			108	91.6							

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3872397-1 12/10/22 12:14

Analyte	MB Result	MB Qualifier	MB Uncertainty	MB MDA
	pCi/l		+ / -	pCi/l
Radium-226	0.00836	<u>U</u>	0.0284	0.0552
(T) Barium-133	93.9		93.9	

L1560335-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1560335-01 12/10/22 12:14 • (DUP) R3872397-5 12/10/22 12:14

Analyte	Original Result	Original Uncertainty	Original MDA	DUP Result	DUP Uncertainty	DUP MDA	Dilution	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	+ / -	pCi/l		%			%	
Radium-226	0.349	0.229	0.231	0.304	0.250	0.231	1	13.7	0.132		20	3
(T) Barium-133	102			99.1	99.1							

Laboratory Control Sample (LCS)

(LCS) R3872397-2 12/10/22 12:14

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-226	5.02	4.93	98.3	80.0-120	
(T) Barium-133			91.8		

L1560368-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1560368-05 12/10/22 12:14 • (MS) R3872397-3 12/10/22 12:14 • (MSD) R3872397-4 12/10/22 12:14

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-226	20.0	0.444	20.1	20.4	98.5	100	1	75.0-125			1.48		20
(T) Barium-133		86.4			95.9	91.6							

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

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

### Abbreviations and Definitions

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

### Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

# ACCREDITATIONS & LOCATIONS

## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



# BALDWIN GROUNDWATER SAMPLING

Vistra Energy

NOVEMBER 2022

**RAMBOLL**



**Health and Safety Tailgate Meeting**



**Daily Health and Safety Tailgate Meeting**

Date 11/14/2022

Time 1200

Site BALDWIN

Job Number 1940102653

Work to be Performed Caroline to complete initial site specific framing, gauge wells for water levels

Health and Safety Topics Discussed COLD STRESS/Exposure, SLIPS/TRIPS/FALLS  
Attention to driving around site (watch wet areas)

**Attendees**

Name (printed)	Signature	Company
Caroline Chavers	<i>Caroline Chavers</i>	REH
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Site Safety Officer Conducting Meeting (print)	Signature	Company
<u>Andrew Hardwick</u>	<i>[Signature]</i>	<u>Ramboll</u>



**Daily Health and Safety Tailgate Meeting**

Date 11/15/22

Time 0700

Site Baldwin

Job Number 1940102653 1000.LBR

Work to be Performed Sampling MW networks (Low-Flow)

Health and Safety Topics Discussed Driving hazards, cold stress

**Attendees**

Name (printed)	Signature	Company
Caroline Cravers	<i>Caroline Cravers</i>	REH
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Site Safety Officer Conducting Meeting (print) Andrew Hardwick Signature *[Signature]* Company Ramboll









**Well Condition Field Form**

# WELL CONDITION FIELD FORM

Site : Baldwin Power Plant, Baldwin, IL  
 Project # : 1940102653  
 Task # : 1000.LBR

Date : 11/14/2022  
 Samplers : Andrew Hardwick, Caroline Chavers

Time	EVERY SAMPLING EVENT										AT LEAST ONCE A YEAR			Field Comments:	
	Location	Surface Seal	Lid	Gasket	Lock	Cap	Protection (bumper posts, etc.)	Bailer	Pump	Well Casing	Depth to Water (Feet)	Expected Well Depth (feet)	Field Measured Well Depth (feet)		Well Base Sediment Thickness (feet)
1512	TPZ-159	G	G	N/A	G	G	G	N/A	N/A	See comment	NA	N/A			distruction in well casing at 3.87' - could not get past for well
	XPW01	G	G	N/A	G	G	G	N/A	N/A	G	10.90	N/A			Stuck up, no pump
	XPW06	G	G	G	G	G	G-1 post	N/A	N/A	G	2.65				flush mount well, no pump
	XPW02	G					▲	N/A	N/A	G	4.40				stuck up no pump
	XPW05	G					▲			G	4.94				stuck up, no pump
	XPW04	G					▲	▲	▲	G	8.02				stuck up, no pump
1525	TPZ-164	G					▲	N/A	N/A	G	3.92				Stuck up, no pump
	MW-194	G					▲	N/A	N/A	G	6.88				Stuck up, no pump installed in well
	MW-394	G					▲	N/A	N/A	G	5.60				
	MW-193	G					▲	N/A	N/A	G	9.04				
	MW-393	G					▲	N/A	N/A	G	8.57				
	MW-192	G					▲	N/A	N/A	G	8.37				
	MW-392	G					▲	N/A	N/A	G	8.94				
1532	OW-156	G					▲	N/A	N/A	G	8.55				existing bladder pump in well, stuck up
	OW-256	G					▲	N/A	N/A	G	11.12				" "
	MW-356	G					▲	N/A	N/A	G	4.42				" "
1539	PZ-169	G					▲	N/A	G	G	14.36				Stuck up existing bladder pump in well
1601	MW-369	G					▲		G	G	13.15				
1604	PZ-170	G					▲		G	G	17.02				

# WELL CONDITION FIELD FORM

Site : Baldwin Power Plant, Baldwin, IL  
 Project # : 1940102653  
 Task # : 1000.LBR

Date : 11/14/22  
 Samplers : Andrew Hardwicke Caroline Chavers (RAMBOLL)

Time	EVERY SAMPLING EVENT										AT LEAST ONCE A YEAR			Field Comments:		
	Location	Surface Seal	Lid	Gasket	Lock	Cap	Protection (bumper posts, etc.)	Bailer	Pump	Well Casing	Depth to Water (Feet)	Expected Well Depth (feet)	Field Measured Well Depth (feet)		Well Base Sediment Thickness (feet)	
1608	MW-370	G	G	G	G	G	G	N/A	G	G	19.07				N/A	
1611	P2-182										18.77					
1615	MW-382										16.85					
1619	OW-257										6.96					
1622	OW-157										7.47					
1625	MW-390										8.78					
1630	MW-384										14.45					
1639	MW-383	▼	▼	▼	▼	▼	▼				19.55					
1649	MW-304	G	→					N/A	G	▼		10.23				existing dead pump in well (bladder)
1655	MW-104SR	G	→					N/A	G	G		14.61				" "
1658	MW-104LX	G	→						G			14.62			" "	
	MW-204	G	G	G	see notes	G	G		G		12.57				missing lock, existing bladder pump in well	
	MW-203	G	G	G	G	G	G		G		7.97					
	MW-305	G	G	G	G	G	G		G		10.13					
	MW-306	G	G	G	G	G	G		G		17.89					
	MW-307	G	→					see notes	▼	N/A	▼	7.11				no pump in well protective casing needs to be re-marked; well p. casing has cap lock
	MW-258	G	→					▼	N/A	N/A	G	14.17				no pump in well, stuck up
	MW-358	G	→					▼				79.14				" "
	MW-15BR	G	→					▼	▼	▼	▼	13.61				" "

Note: MW-307 protective steel casing can no longer lock; steel cap eye-let has rusted away.



# WELL CONDITION FIELD FORM

Site : Baldwin Power Plant, Baldwin, IL  
 Project # : 1940102653  
 Task # : 1000.LBR

Date : 11/14/2022  
 Samplers : Andrew Hardwick, Caroline Chavers (Ramboll)

Location	EVERY SAMPLING EVENT									AT LEAST ONCE A YEAR			Field Comments:	
	Surface Seal	Lid	Gasket	Lock	Cap	Protection (bumper posts, etc.)	Bailer	Pump	Well Casing	Depth to Water (Feet)	Expected Well Depth (feet)	Field Measured Well Depth (feet)		Well Base Sediment Thickness (feet)

AAH  
11/14/22

P : Poor - Potential or Evident Sample Integrity Issues (additional comments required, picture(s) desirable)  
 F : Fair - Future Sample Integrity May Be Compromised if Well Repair/Upgrade Is Not Undertaken (additional comments required, picture(s) desirable)  
 G : Good (additional comments not required)  
 n/a : Not Applicable



**Groundwater Sampling  
Forms**

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 1940102653 Task #: 1000-LBR Start Date: 11/15/2022 Time: 0830  
 Field Personnel: AEH, CAC Finish Date: \_\_\_\_\_ Time: 0950

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>XFW*06</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>5-10</u> <del>10-15</del> BTOC	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>Alexis Peristaltic #24345</u>
Borehole Diameter: <u>6</u> Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>~8' BTOC</u>
Filter Pack Interval: _____		Stabilized Pumping Rate: <u>125 ml/min</u>

DEPTH MEASUREMENTS					VOLUME CALCULATION AND PRODUCTION INFORMATION				
	INITIAL		FINAL		VOLUME CALCULATION AND PRODUCTION INFORMATION				
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	Volume Calculation Type: <input type="checkbox"/> Well Casing <input checked="" type="checkbox"/> Borehole				
LNAPL	<u>N/A</u>				Volume Per Foot: _____				
Groundwater	<u>2.59</u>	<u>0830</u>	<u>2.90</u>	<u>0950</u>	Standing Water Column: _____ feet				
DNAPL	<u>N/A</u>				1 Well Volume: _____ Gallons 3 Well Volumes: _____ Gallons				
Casing Base	<u>10.22</u>	<u>0830</u>	<u>10.22</u>	<u>0950</u>	5 Well Volumes: _____ Gallons 10 Well Volumes: _____ Gallons				
					Total Volumes Produced: _____ Gallons				
					Well Purged Dry? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				

Water Level Serial #: SOLINST # 532181 Water Quality Probe Type and Serial #: AT100 # 454579

### WATER QUALITY INDICATOR PARAMETERS

el. time	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
0:00	initial	0838	—	2.59	—	10.20	7.21	1619.9	3.68	0.65	138.2	Clear
07:56	purge	0846		2.90	0.31	13.00	7.15	1590.4	0.32	2.71	31.9	
10:56		0849		2.90	0					0.00		
13:56		0852		2.90						0.00		
16:56		0855		2.90						0.00		
19:56		0858		2.90						0.00		
22:56		0901		2.90						0.00		
25:56		0904		2.90						0.00		

■ SAMPLE ID: XFW06 @ 09:29

■ Note: all parameters stable except temp. (possibly due to colder ambient conditions)

JARS FILLED:

- 1 - 250 ml Plastic (HNO<sub>3</sub>)
- 1 - 1L Plastic (unpreserved)
- 2 - 1L Plastic (HNO<sub>3</sub>)

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 1940102653 Task #: 1000-LBR Start Date: 11/15/2022 Time: 0830  
 Field Personnel: AH, CAL Finish Date: \_\_\_\_\_ Time: 0950

### WELL INFORMATION

Well ID: XFW06  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<u>Purge</u>	<u>0907</u>		<u>2.90</u>	<u>—</u>	<u>↗</u>	<u>↘</u>	<u>↘</u>	<u>↘</u>	<u>0.00</u>	<u>↗</u>	<u>Clear</u>
<u>31:56</u>	<u>0910</u>			<u>—</u>					<u>0.00</u>		
<u>34:56</u>	<u>0913</u>			<u>—</u>							
<u>37:52</u>	<u>0916</u>			<u>—</u>							
<u>40:56</u>	<u>0919</u>			<u>—</u>							
<u>43:56</u>	<u>0922</u>			<u>—</u>							
<u>46:56</u>	<u>0925</u>			<u>—</u>					<u>0.00</u>		
<u>49:56</u>	<u>0928</u>	<u>2.0 gal</u>	<u>2.90</u>	<u>—</u>	<u>12.34</u>	<u>7.27</u>	<u>1615.2</u>	<u>0.27</u>	<u>0.00</u>	<u>-47.3</u>	<u>Clear</u>
	<u>0929</u>	<u>SAMPLED WELL</u>									

elapsed time  
 28:56  
 31:56  
 34:56  
 37:52  
 40:56  
 43:56  
 46:56  
 49:56

### NOTES (continued)

SAMPLE ID: XFW06 @ 09:29  
 - all parameters stable except temp. - due to colder ambient conditions

### ABBREVIATIONS

Cond. - Actual Conductivity FT BTOP - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius
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## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 104002653 Task #: 1000-LBR Start Date: 11/15/22 Time: 1015  
 Field Personnel: AFH, CAR Finish Date: \_\_\_\_\_ Time: 1241

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
(Shallow) Well ID: <u>XPW01</u> Casing ID: <u>2</u> Inches Screen Interval: <u>~10-15' BTOC</u> Borehole Diameter: <u>6"</u> Inches Filter Pack Interval: _____	<input type="checkbox"/> Well Development <input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling <input type="checkbox"/> Well Volume Approach Sampling <input type="checkbox"/> Other (Specify below)	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump Bailer Type: n/a Pump Type and Serial #: <u>ALEXIS PERISTALTIC S/N 2434</u> Tube/Pump Intake Depth: <u>~12.5 ft BTOC</u> or <u>9.5' bgs</u> Stabilized Pumping Rate: <u>180 ml/min</u>

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION			
INITIAL		FINAL		Volume Calculation Type: <input type="checkbox"/> Well Casing <input checked="" type="checkbox"/> Borehole Volume Per Foot: _____ feet Standing Water Column: _____ feet			
Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	1 Well Volume: _____ Gallons	3 Well Volumes: _____ Gallons	5 Well Volumes: _____ Gallons	10 Well Volumes: _____ Gallons
LNAPL	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<del>                             Total Volumes Produced: _____ Gallons                              Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No                         </del>			
Groundwater	<u>10.89</u>	<u>10.89</u>	<u>11:23</u>				
DNAPL	<u>N/A</u>	<u>N/A</u>	<u>12:41</u>				
Casing Base	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>				

Water Level Serial #: 1310-1277 SOLINST 532181 Water Quality Probe Type and Serial #: 754579 AT600

### WATER QUALITY INDICATOR PARAMETERS

el. time (mins)	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
0	initial	1019	<u>0</u>	10.89	—	14.76	7.03	682.10	0.42	143	-46.8	cloudy
6	purge	1025		10.89	—	15.09	7.01	676.7	0.23	144.9	-51.6	
9		1028		10.89	<u>DATA IN</u>		<u>VU-STU</u>					
12		1031		10.89								
15		1034		10.89								slightly cloudy
18		1037		10.89								
21		1040		10.89								
24		1043		10.89								

SAMPLE ID: XPW01 collected @ 11:23.  
 \*triple volume for MS/MSD\*

JARS FILLED =  
 3-250 ml plastic (HNO<sub>3</sub>)  
 3-1L plastic (unpreserved)  
 6-1L plastic (HNO<sub>3</sub>)

Note: WL did not drop despite higher flow rates.

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 19401026 53 Task #: 1000.LBR Start Date: 11/15/22 Time: 1015  
 Field Personnel: AEH CAC Finish Date: \_\_\_\_\_ Time: 1241

### WELL INFORMATION

Well ID: XPW01  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<u>27:00</u>	<u>1046</u>	<u>—</u>	<u>10.89</u>	<u>—</u>	<u>DATA IN WELL SITE</u>	<u>DATA IN WELL SITE</u>	<u>DATA IN WELL SITE</u>	<u>DATA IN WELL SITE</u>	<u>DATA IN WELL SITE</u>	<u>DATA IN WELL SITE</u>	<u>Slightly</u>
<u>30</u>	<u>1049</u>	<u>—</u>	<u>10.89</u>	<u>—</u>							<u>Clear</u>
<u>33:00</u>	<u>1052</u>	<u>—</u>	<u>10.89</u>	<u>—</u>							<u>Clear</u>
<u>36</u>	<u>1055</u>	<u>—</u>	<u>10.89</u>	<u>—</u>							<u>Clear</u>
<u>39:00</u>	<u>1058</u>	<u>—</u>	<u>10.89</u>	<u>—</u>							<u>Clear</u>
<u>42</u>	<u>1101</u>	<u>—</u>	<u>10.89</u>	<u>—</u>							<u>Clear</u>
<u>45:00</u>	<u>1104</u>	<u>—</u>	<u>10.89</u>	<u>—</u>							<u>Clear</u>
<u>48</u>	<u>1107</u>	<u>—</u>	<u>10.89</u>	<u>—</u>							<u>Clear</u>
<u>51:00</u>	<u>1110</u>	<u>—</u>	<u>10.89</u>	<u>—</u>							<u>Clear</u>
<u>54</u>	<u>1113</u>	<u>—</u>	<u>10.89</u>	<u>—</u>							<u>Clear</u>
<u>57:00</u>	<u>1116</u>	<u>—</u>	<u>10.89</u>	<u>—</u>	<u>Clear</u>						
<u>60:00</u>	<u>1119</u>	<u>—</u>	<u>10.89</u>	<u>—</u>	<u>Clear</u>						
<u>63:00</u>	<u>Stable</u>	<u>3.2 gallons</u>	<u>10.89</u>	<u>—</u>	<u>15.37</u>	<u>6.98</u>	<u>679.30</u>	<u>0.07</u>	<u>4.27</u>	<u>-54.7</u>	<u>Clear</u>

elapsed time  
 27:00  
30  
33:00  
36  
39:00  
42  
45:00  
48  
51:00  
54  
57:00  
60:00  
63:00

### NOTES (continued)

Sample well @ 1123  
 sample ID: XPW01 - collected 11/15/22 @ 1123  
 all parameters stable except temp/turbidity, -turb. below 10 NTU  
 -temp likely not stabilizing due to colder ambient temps.

### ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOP - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 11/15/22 Time: 1250  
 Field Personnel: APH GRC Finish Date: \_\_\_\_\_ Time: 1411

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>XPW05</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump TD: <u>31.95</u>
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>~ 18-28 bgs</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>Alexis Peristaltic S/N: 24345</u>
Borehole Diameter: <u>6</u> Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>20.95 ft BDL</u>
Filter Pack Interval: _____		Stabilized Pumping Rate: <u>120 ml/min</u>

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION				
	INITIAL		FINAL					
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole			
LNAPL	<u>N/A</u>				Volume Per Foot: _____			
Groundwater	<u>4.86</u>	<u>12:50</u>	<u>4.86</u>	<u>13:43</u>	Standing Water Column: _____ feet			
DNAPL	<u>N/A</u>				1 Well Volume: _____ Gallons			
Casing Base	<u>N/A</u>				5 Well Volumes: _____ Gallons			
					10 Well Volumes: _____ Gallons			
					Total Volumes Produced: _____ Gallons			
					Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No			

Water Level Serial #: 3010-1237 RAC SOLINST # 363824 Water Quality Probe Type and Serial # 454579-S/N (AT600)

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>1257</u>	<u>0</u>	<u>4.86</u>	<u>—</u>	<u>13.31</u>	<u>7.03</u>	<u>1226.7</u>	<u>1.95</u>	<u>208.19</u>	<u>-52.6</u>	<u>cloudy</u>
purge	<u>1303</u>		<u>4.86</u>	<u>—</u>	<u>14.41</u>	<u>7.03</u>	<u>1134.3</u>	<u>0.30</u>	<u>125.91</u>	<u>-88.2</u>	<u>—</u>
	<u>1306</u>		<u>4.86</u>	<u>DATA</u>	<u>N</u>	<u>VU-SITU</u>					
	<u>1309</u>		<u>4.86</u>	<u>—</u>							
	<u>1312</u>		<u>4.86</u>	<u>—</u>							<u>↓</u>
	<u>1315</u>		<u>4.86</u>	<u>—</u>							<u>clean</u>
	<u>1318</u>		<u>4.86</u>	<u>—</u>							<u>↓</u>
	<u>1321</u>		<u>4.86</u>	<u>—</u>							<u>↓</u>

SAMPLE ID: XPW05 @ 13:43  
 - all parameters stable except temp.  
 DTB: 31.95 BDL

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRIA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 11/15/22 Time: 1250  
 Field Personnel: APH CAP Finish Date: 11/15/22 Time: 1411

### WELL INFORMATION

Well ID: XPW05  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
27:00 30 33:00 36 39 42:00 4500	Purge		4.86	—							clear
		1324		4.86	—						
		1327		4.86	—						
		1330		4.86	—						
		1333		4.86	—						
	1336	↓	4.86	—							
	1339		4.86	—							
	1342	2.5	4.86	—	15.38	7.67	795.65	0.10	3.72	-148.8	
	Sample @ 1343										
APH 11/15/22											

### NOTES (continued)

sample XPW05 @ 1343 on 11/15/22  
 all parameters stable except temp - likely due to colder ambient conditions.

### ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 1946102653 Task #: 1000.LBR Start Date: 11/15/22 Time: 1422  
 Field Personnel: AFH CAP Finish Date: \_\_\_\_\_ Time: 1618

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>XPW02</u> Casing ID: <u>2</u> Inches Screen Interval: <u>6-11</u> bgs Borehole Diameter: <u>6</u> Inches Filter Pack Interval: _____	<input type="checkbox"/> Well Development <input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling <input type="checkbox"/> Well Volume Approach Sampling <input type="checkbox"/> Other (Specify below)	Purge Method: <input type="checkbox"/> Bailor <input checked="" type="checkbox"/> Pump Bailor Type: <u>n/a</u> Pump Type and Serial #: <u>Alexis Peristaltic (24345)</u> Tube/Pump Intake Depth: <u>11</u> ft Stabilized Pumping Rate: <u>140 ml/min</u>

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION				
	INITIAL		FINAL		Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole			
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	Volume Per Foot: _____			
LNAPL					Standing Water Column: _____ feet			
Groundwater	<u>4.39</u>	<u>1422</u>	<u>4.39</u>	<u>1532</u>	1 Well Volume: _____ Gallons 3 Well Volumes: _____ Gallons			
DNAPL					5 Well Volumes: _____ Gallons 10 Well Volumes: _____ Gallons			
Casing Base					Total Volumes Produced: _____ Gallons			
				Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No				

Water Level Serial #: 3D10-1237 SOLINST Water Quality Probe Type and Serial #: 454579 AT 600

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>1426</u>	<u>0</u>	<u>4.39</u>	<u>—</u>	<u>11.86</u>	<u>7.52</u>	<u>1023.9</u>	<u>5.65</u>	<u>143.17</u>	<u>-45.4</u>	<del>slightly cloudy</del>
purge	<u>1432</u>		<u>4.39</u>		<u>12.76</u>	<u>7.54</u>	<u>1016.1</u>	<u>0.32</u>	<u>77.61</u>	<u>-122.7</u>	<u>slightly cloudy</u>
	<u>1435</u>		<u>4.39</u>	<u>DATA IN VU SITE</u>							
	<u>1438</u>		<u>4.39</u>								
	<u>1441</u>		<u>4.39</u>								
	<u>1444</u>		<u>4.39</u>								
	<u>1447</u>		<u>4.39</u>								
	<u>1450</u>		<u>4.39</u>								

SAMPLE ID: XPW02 @ 15:33  
+ DUP-01 @ 15:43

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 11040102653 Task #: \_\_\_\_\_ Start Date: 11/15/22 Time: 1422  
 Field Personnel: AFH CAR Finish Date: \_\_\_\_\_ Time: 1614

### WELL INFORMATION

Well ID: XPW02  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
	1453		4.39	—							
	1456		4.39	—							
33:00	1459		4.39	—							
	1502		4.39	—							
39:00	1505		4.39	—							
*	1508		4.39	—							silty/black
45:00	1511		4.39	—							silty/black
	1514		4.39	—							clear
51:00	1517		4.39	—							
	1520		4.39	—							
	1523		4.39	—							
1:00:00	1526		4.39	—							
	1529		4.39	—							
1:06:00	1532	2.5 gal	4.39	—	12.92	7.60	911.84	0.76	31.14	-141.8	

### NOTES (continued)

sample-XPW02 on 11/15/22 @ 1533  
 -DUP-01 on 11/15/22 @ ~~1543~~ 1543

some parameters not stable, at time of sampling (DO/Temp/Cond. not stable)  
 \* Black, thick water being purged. Silty, clear at time of sample

### ABBREVIATIONS

Cond. - Actual Conductivity	ORP - Oxidation-Reduction Potential
FT BTOC - Feet Below Top of Casing	SEC - Specific Electrical Conductance
na - Not Applicable	SU - Standard Units
nm - Not Measured	Temp - Temperature
	°C - Degrees Celsius

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 16401021053 Task #: 1000.L13R Start Date: 11/15/22 Time: 1626  
 Field Personnel: APH CAL Finish Date: 11/15/22 Time: 1743

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>XPW04</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>~11ft - 21</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>Alexis Peristaltic, SN: 24345</u>
Borehole Diameter: <u>6</u> Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>~16 BTOL</u>
Filter Pack Interval: _____		Stabilized Pumping Rate: <u>140 ml/min</u>

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION				
	INITIAL		FINAL					
	Depth FT BTOL	Time (24-Hour)	Depth FT BTOL	Time (24-Hour)	Volume Calculation Type: <input type="checkbox"/> Well Casing <input checked="" type="checkbox"/> Borehole			
LNAPL					Volume Per Foot: _____			
Groundwater	<u>7.93</u>	<u>16:26</u>	<u>7.93</u>	<u>17:09</u>	Standing Water Column: <u>N/A</u> feet			
DNAPL					1 Well Volume: _____ Gallons			
Casing Base					5 Well Volumes: _____ Gallons			
					10 Well Volumes: _____ Gallons			
					Total Volumes Produced: _____ Gallons			
					Well Purged Dry? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			

Water Level Serial #: 3010-1237 SOLINST Water Quality Probe Type and Serial #: 454579 AT600

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>1630</u>	<u>0</u>	<u>7.93</u>	<u>—</u>	<u>14.66</u>	<u>7.92</u>	<u>813.69</u>	<u>0.68</u>	<u>146.66</u>	<u>-64.5</u>	<u>clear</u>
purge	<u>1636</u>		<u>7.93</u>	<u>—</u>	<u>14.61</u>	<u>8.07</u>	<u>812.52</u>	<u>0.28</u>	<u>126.76</u>	<u>-143.1</u>	<u>—</u>
	<u>1639</u>		<u>7.93</u>	<u>—</u>	<u>DATA IN VU-SITU</u>						
	<u>1642</u>		<u>7.93</u>	<u>—</u>							
	<u>1645</u>		<u>7.93</u>	<u>—</u>							
	<u>1648</u>		<u>7.93</u>	<u>—</u>							
	<u>1651</u>		<u>7.93</u>	<u>—</u>							
	<u>1654</u>		<u>7.93</u>	<u>—</u>							<u>clear</u>

SAMPLE ID: XPW04 @ 17:10.  
 - all parameters were stable except temp @ time of sampling.

elapsed time  
 0:00  
 6:00  
 9:00  
 12:00  
 15:00  
 18:00  
 21:00  
 24:00





## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 11040102653 Task #: 1000.LBR Start Date: 11/16/22 Time: 0906  
 Field Personnel: AFH GAC Finish Date: 0945 0955 Time: 0945 0955

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>TPZ-164</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: _____	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>Alexis Peristaltic 24345</u>
Borehole Diameter: _____ Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>7.5' BTCL</u>
Filter Pack Interval: _____		Stabilized Pumping Rate: <u>110 ml/min</u>

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION				
	INITIAL		FINAL					
	Depth FT BTCL	Time (24-Hour)	Depth FT BTCL	Time (24-Hour)	Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole			
LNAPL	<u>NA</u>				Volume Per Foot: _____			
Groundwater	<u>3.93</u>	<u>906</u>	<u>3.93</u>	<u>0945 0955</u>	Standing Water Column: <u>11.1</u> feet			
DNAPL	<u>NA</u>				1 Well Volume: _____ Gallons			
Casing Base					5 Well Volumes: _____ Gallons			
					10 Well Volumes: _____ Gallons			
					Total Volumes Produced: _____ Gallons			
					Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No			

Water Level Serial #: 3010-1237 SOLINST Water Quality Probe Type and Serial #: 454579 AT600

### WATER QUALITY INDICATOR PARAMETERS

el. time	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
0:00	initial	910	<u>0</u>	<u>3.93</u>	<u>—</u>	<u>10.25</u>	<u>7.26</u>	<u>884.67</u>	<u>1.03</u>	<u>16.95</u>	<u>-0.7</u>	<u>clear</u>
6:00	purge	916	<u>—</u>	<u>3.93</u>	<u>—</u>	<u>11.7</u>	<u>7.29</u>	<u>881.28</u>	<u>0.53</u>	<u>11.20</u>	<u>-76.0</u>	<u>—</u>
		919	<u>—</u>	<u>3.93</u>	<u>—</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>
12:00		922	<u>—</u>	<u>3.93</u>	<u>—</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>
		925	<u>—</u>	<u>3.93</u>	<u>—</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>
18:00		928	<u>—</u>	<u>3.93</u>	<u>—</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>Clear</u>
		931	<u>—</u>	<u>3.93</u>	<u>—</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>
24:00		934	<u>—</u>	<u>3.93</u>	<u>—</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>	<u>DATA</u>

**SAMPLE ID: TPZ-164 @ 0944.**

**DTB: 9.54' BTCL**

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1640102653 Task #: 1000-LBR Start Date: 11/16/22 Time: 0900  
 Field Personnel: APR MAC Finish Date: 11/16/22 Time: 0955

### WELL INFORMATION

Well ID: TPZ-164  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity	
27:00 30:00 33:00 Purge	937	—	3.93	DATA IN VU-SITU →							clear	
	940	—	3.93									clear
stable	943		3.93		12.49	7.56	876.42	0.12	4.95	-119.2		clear
Sample	944	on 11/16/22										

### NOTES (continued)

Sample TPZ-164 @ 944 on 11/16/22.  
  
 stable parameters except temperature

### ABBREVIATIONS

Cond. - Actual Conductivity	ORP - Oxidation-Reduction Potential
FT BTOC - Feet Below Top of Casing	SEC - Specific Electrical Conductance
na - Not Applicable	SU - Standard Units
nm - Not Measured	Temp - Temperature
	°C - Degrees Celsius

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 1440102653 Task #: 1000.LBR Start Date: 11/16/22 Time: 1038  
 Field Personnel: APH JAC Finish Date: 11/16/22 Time: 1127

### WELL INFORMATION

Well ID: MW-192 (192)  
 Casing ID: 2 Inches  
 Screen Interval: 20-30' BGS  
 Borehole Diameter: 6 Inches  
 Filter Pack Interval: \_\_\_\_\_

### EVENT TYPE

- Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: Alexis Peristaltic (S/N: 24345)  
 Tube/Pump Intake Depth: ~27.5' BTOC  
 Stabilized Pumping Rate: 100 mL/min

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)
LNAPL				
Groundwater	<u>8.24</u>	<u>1038</u>	<u>14.72</u>	<u>1127</u>
DNAPL				
Casing Base				

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: \_\_\_\_\_  
 Standing Water Column: N/A feet  
 1 Well Volume: \_\_\_\_\_ Gallons 3 Well Volumes: \_\_\_\_\_ Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons 10 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Produced: \_\_\_\_\_ Gallons  
 Well Purged Dry?  Yes  No

Water Level Serial #: 3010-1277 SOLWST Water Quality Probe Type and Serial #: 454579 AT600

### WATER QUALITY INDICATOR PARAMETERS

ELAPSED TIME

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	1039	<u>0</u>	<u>8.71</u>	<u>0</u>	<u>9.50</u>	<u>7.22</u>	<u>873.06</u>	<u>0.00</u>	<u>81.31</u>	<u>-30.5</u>	<u>clear</u>
purge	1045	—	<u>9.41</u>	<u>0.7</u>	<u>10.28</u>	<u>7.05</u>	<u>861.47</u>	<u>0.47</u>	<u>19.65</u>	<u>-62.4</u>	—
	1048	—	<u>9.87</u>	<u>0.46</u>	DATA IN VU-SITLI						
	1051	—	<u>10.13</u>	<u>0.26</u>							
	1054	—	<u>10.64</u>	<u>0.51</u>							
	1057	—	<u>10.91</u>	<u>0.27</u>							
	1100	—	<u>11.06</u>	<u>0.15</u>							
	1103	—	<u>11.53</u>	<u>0.47</u>							

■ SAMPLE ID: MW-192 @ 11:28.

Note: all parameters were stable at sample time except temp & turbidity (was under 10 NTU)

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 11040102053 Task #: 1000.LBR Start Date: 11/16/22 Time: 1038  
 Field Personnel: CAL, APH Finish Date: 11/16/22 Time: 1127

### WELL INFORMATION

Well ID: MW-192  
 Casing ID: Z inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

elapsed time

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Purge	1106		11.99	0.46							
	1109		12.14	0.15							
	1112		12.54	0.4							
	1115		12.86	0.32							
	1118		13.17	0.31							
	1121		13.59	0.42				0.20	9.08		
	1124		13.64	0.05				0.19	11.79		
Stable	1127	1.8	14.32	0.68	10.81	7.02	84434	0.19	7.44	-88.5	clear
	1128 - sampled well										

### NOTES (continued)

MW-192 on 11/16/22 @ 1128  
 stable parameters except temp & turbidity.

### ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 18-40102253 1940102653 Task #: 1000-LBR Start Date: 11/10/22 Time: 1218  
 Field Personnel: CAU AFH Finish Date: 11/10/22 Time: 1357

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-392</u> Casing ID: <u>2</u> Inches Screen Interval: <u>74 - 84' bgs</u> Borehole Diameter: <u>6</u> Inches Filter Pack Interval: _____	<input type="checkbox"/> Well Development <input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling <input type="checkbox"/> Well Volume Approach Sampling <input type="checkbox"/> Other (Specify below)	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump Bailer Type: n/a Pump Type and Serial #: <u>AIRUS Peristaltic SW 24345</u> Tube/Pump Intake Depth: <u>~ 82' BTOC</u> Stabilized Pumping Rate: <u>100 mL/min</u>

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION				
	INITIAL		FINAL					
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)				
LNAPL					Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole Volume Per Foot: _____			
Groundwater	<u>8.58</u>	<u>1218</u>	<u>14.85</u>	<u>1303</u>	Standing Water Column: <u>N/A</u> feet 1 Well Volume: _____ Gallons    3 Well Volumes: _____ Gallons 5 Well Volumes: _____ Gallons    10 Well Volumes: _____ Gallons Total Volumes Produced: _____ Gallons Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No			
DNAPL								
Casing Base								

Water Level Serial #: 3010-1237 SOLINST    Water Quality Probe Type and Serial #: 454579 AT600

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>1219</u>	<u>0</u>	<u>8.58</u>	<u>—</u>	<u>7.83</u>	<u>7.85</u>	<u>2800.3</u>	<u>7.03</u>	<u>15.77</u>	<u>-14.6</u>	<u>clear</u>
purge	<u>1225</u>	<u>—</u>	<u>10.08</u>	<u>1.5</u>	<u>8.89</u>	<u>7.97</u>	<u>3457.9</u>	<u>0.60</u>	<u>13.34</u>	<u>-168.8</u>	<u>—</u>
	<u>1228</u>	<u>—</u>	<u>10.56</u>	<u>0.48</u>	<u>DATA IN VU-SITL</u>						
	<u>1231</u>	<u>—</u>	<u>10.90</u>	<u>0.34</u>							
	<u>1234</u>	<u>—</u>	<u>11.03</u>	<u>0.13</u>							
	<u>1237</u>	<u>—</u>	<u>11.44</u>	<u>0.41</u>							
	<u>1240</u>	<u>—</u>	<u>11.97</u>	<u>0.53</u>							
	<u>1243</u>	<u>—</u>	<u>12.38</u>	<u>0.41</u>							

elapsed time  
 01:00  
 6:00  
 09:00  
 12:00  
 15:00  
 18:00  
 21:00  
 24:00

SAMPLE ID: MW-392 @ 1304.

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALWIN PP. Client: VISTRA  
 Project Number: 1640102453 Task #: 1000-LBR Start Date: 11/16/22 Time: 1218  
 Field Personnel: AFH CAC Finish Date: \_\_\_\_\_ Time: 1357

### WELL INFORMATION

Well ID: MW-392  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
ELAPSED TIME 27:00 30:00 33:00 36:00 39 42 45:00	Purge	1246	—	12.82	0.44							Clear
		1249		13.40	0.58							
		1252		13.40								
		1255		13.64	0.24							
		1258		14.12	0.48							
	↓	1301		14.50	0.38	7.24						
	Stable	1303	1.5	14.85	0.35	7.18	7.98	3,333.3	0.19	5.03	-100.89	Clear
							<del>7.98</del>	<del>3,333.3</del>	<del>0.19</del>	<del>5.03</del>	<del>-100.89</del>	<del>Clear</del>
	Sample taken @ 1304 on MW-392 on 11/16/22											

### NOTES (continued)

Sample MW-392 on 11/16/22 @ 1304  
 stable parameters except temp.  
 Turbidity < 10 NTU.

### ABBREVIATIONS

Cond. - Actual Conductivity	ORP - Oxidation-Reduction Potential
FT BTOC - Feet Below Top of Casing	SEC - Specific Electrical Conductance
na - Not Applicable	SU - Standard Units
nm - Not Measured	Temp - Temperature
	°C - Degrees Celsius

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN P.P. Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 11/16/2022 Time: 1255  
 Field Personnel: AEH, CAL Finish Date: 11/16/2022 Time: 1430

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-305</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>? - ?</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>Dedicated bladder pump (in-well) w/ MP-50 controller</u>
Borehole Diameter: <u>?</u> Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>~17' BITV</u>
Filter Pack Interval: <u>?</u>		Stabilized Pumping Rate: <u>100 ml/min</u>

DEPTH MEASUREMENTS					VOLUME CALCULATION AND PRODUCTION INFORMATION					
	INITIAL		FINAL		VOLUME CALCULATION AND PRODUCTION INFORMATION					
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	Volume Calculation Type:					
LNAPL	<u>N/A</u>				<input type="checkbox"/> Well Casing	<input type="checkbox"/> Borehole				
Groundwater	<u>10.10</u>	<u>12:55</u>	<u>10.95</u>	<u>14:30</u>	Volume Per Foot: <u>N/A</u>					
DNAPL	<u>N/A</u>				Standing Water Column: <u>N/A</u> feet					
Casing Base	<u>N/A</u>				1 Well Volume: <u>N/A</u> Gallons	3 Well Volumes: <u>N/A</u> Gallons				
					5 Well Volumes: <u>N/A</u> Gallons	10 Well Volumes: <u>N/A</u> Gallons				
					Total Volumes Produced: <u>N/A</u> Gallons					
					Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No					

Water Level Serial #: SOLINS # 363824 Water Quality Probe Type and Serial #: ATLAD # 454596

### WATER QUALITY INDICATOR PARAMETERS

ELAPSED TIME (MINS)	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
0:00	initial	12:55	—	10.10	—	16.37	6.71	1,295.2	3.41	64.53	180.5	Slightly cloudy
6:00	purge	13:01		10.95	0.85	16.09	6.69	1306.1	3.06	68.20	180.3	
9:00		1304		10.95	0.00							
12:00		1307										
15:00		1310										
18:00		1313										Clear
21:00		1316										Clear
24:00		1319										Clear

SAMPLE ID: MW-305 @ 1415

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 11/16/2022 Time: 1255  
 Field Personnel: AFH, CAZ Finish Date: \_\_\_\_\_ Time: 1430

### WELL INFORMATION

Well ID: MW-305  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

elapsed time (mins)	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
27:00	Purge	13:22		10.95	0.00							Slightly cloudy
30:00		13:25		10.95								
33:00		13:28		10.95								
36:00		13:31										
39:00		13:34										
42:00		13:37										
45:00		13:40										
01:03:00		13:58										Clear
01:06:00		14:01										
01:09:00		14:04				14.49	6.78	1314.0	2.57	0.00		179.5
01:12:00		14:07				14.62	6.79	1315.9	2.55	5.81		178.9
01:15:00		14:10				14.68	6.81	1311.5	2.62	6.40		177.9
01:18:00	(STABLE)	14:13	3 GAL	10.95	0.00	14.65	6.83	1310.8	2.41	3.32	3.32	Clear
		14:15	SAMPLED WELL; ALL P'S STABLE.									

### NOTES (continued)

☑ SAMPLE ID: MW-305 @ 14:15

### ABBREVIATIONS

Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius
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## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN FP Client: VISTRA  
 Project Number: 1640102653 Task #: 1000.LBR Start Date: 11/16/22 Time: 1402  
 Field Personnel: AEH CAC Finish Date: 11/16/22 Time: 1527

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
(stickup) Well ID: <u>MW-393</u> Casing ID: <u>2</u> Inches Screen Interval: _____ Borehole Diameter: _____ Inches Filter Pack Interval: _____	<input type="checkbox"/> Well Development <input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling <input type="checkbox"/> Well Volume Approach Sampling <input type="checkbox"/> Other (Specify below)	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump Bailer Type: n/a Pump Type and Serial #: <u>Alexis Peristaltic 24345</u> (L/N: ) Tube/Pump Intake Depth: <u>~75' BTOC</u> Stabilized Pumping Rate: <u>120 mL/MIN</u>

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION				
	INITIAL		FINAL					
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	Volume Calculation Type: <input type="checkbox"/> Well Casing <input checked="" type="checkbox"/> Borehole			
LNAPL					Volume Per Foot: _____			
Groundwater	<u>8.09</u>	<u>14:02</u>	<u>15.03</u>	<u>1451</u>	Standing Water Column: _____ feet			
DNAPL					1 Well Volume: _____ Gallons			
Casing Base					5 Well Volumes: _____ Gallons			
					10 Well Volumes: _____ Gallons			
					Total Volumes Produced: _____ Gallons			
					Well Purged Dry? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			

Water Level Serial #: 3010-1237 SOLINST Water Quality Probe Type and Serial #: 454579 FT 600

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>1406</u>	—	<u>8.09</u>	—	<u>11.26</u>	<u>8.29</u>	<u>3325.6</u>	<u>4.27</u>	<u>232.85</u>	<u>-23.3</u>	<u>clear</u>
purge	<u>1412</u>		<u>9.57</u>	<u>1.48</u>	<u>11.62</u>	<u>8.13</u>	<u>3718.5</u>	<u>0.47</u>	<u>198.57</u>	<u>-125.3</u>	<u>clear</u>
	<u>1415</u>		<u>10.12</u>	<u>0.55</u>	<u>DATA</u>	<u>NO</u>	<u>VU-SITU</u>	<u>clear</u>	<u>clear</u>	<u>clear</u>	<u>clear</u>
	<u>1418</u>		<u>10.42</u>	<u>0.3</u>							
	<u>1421</u>		<u>10.92</u>	<u>0.5</u>							
	<u>1424</u>		<u>11.36</u>	<u>0.44</u>							
	<u>1427</u>		<u>11.79</u>	<u>0.43</u>							
	<u>1430</u>		<u>12.3</u>	<u>0.51</u>							

SAMPLE ID: MW-393 @ 14:52

elapsed time of purge  
 0:00  
 6:00  
 09:00  
 12:00  
 15:00  
 18:00  
 21:00  
 24:00

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1640102653 Task #: 1000-LBR Start Date: 11/16/22 Time: 1402  
 Field Personnel: AFH CAZ Finish Date: \_\_\_\_\_ Time: 1527

### WELL INFORMATION

Well ID: MW-393  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

elapsed time of purge

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<u>Purge</u>	<u>1433</u>		<u>12.87</u>	<u>0.57</u>							<u>Clear</u>
	<u>1436</u>		<u>13.0</u>	<u>0.13</u>							
	<u>1439</u>		<u>13.42</u>	<u>0.42</u>							
	<u>1442</u>		<u>13.80</u>	<u>0.37</u>							
	<u>1445</u>		<u>14.18</u>	<u>0.38</u>					<u>8.13</u>	<u>6.36</u>	
	<u>1448</u>		<u>14.54</u>	<u>0.34</u>					<u>6.36</u>	<u>6.36</u>	
<u>Stable</u>	<u>1451</u>	<u>1.5</u>	<u>15.03</u>	<u>0.49</u>	<u>10.82</u>	<u>8.11</u>	<u>3,620.2</u>	<u>0.10</u>	<u>7.52</u>	<u>7.52</u>	<u>35.5</u>
<u>Sample 1452 MW-393 on 11/16/22</u>											
<u>AFH 11/16/22</u>											

### NOTES (continued)

Sample MW-393 on 11/16/22 @ 1452  
 stable parameters except temp. Turbidity < 10 NTU.

### ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 1940102653 Task #: 1000-LBR Start Date: 11/16/2022 Time: 1450  
 Field Personnel: AFM, LAC Finish Date: 11/16/2022 Time: 1545

### WELL INFORMATION

Well ID: MW-203  
 Casing ID: 2 Inches  
 Screen Interval: ?  
 Borehole Diameter: 2 Inches  
 Filter Pack Interval: ?

### EVENT TYPE

- Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: Dedicated (existing) bladder pump w/ MP-50 controller  
 Tube/Pump Intake Depth: ~27' BTOC  
 Stabilized Pumping Rate: 140 ml/min

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)
LNAPL	<u>N/A</u>	<u>14:50</u>	<u>17.51</u>	<u>1545</u>
Groundwater	<u>7.98</u>	<u>14:50</u>	<u>17.51</u>	<u>1545</u>
DNAPL	<u>N/A</u>	<u>14:50</u>	<u>17.51</u>	<u>1545</u>
Casing Base	<u>N/A</u>	<u>14:50</u>	<u>17.51</u>	<u>1545</u>

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: \_\_\_\_\_  
 Standing Water Column: \_\_\_\_\_ feet  
 1 Well Volume: \_\_\_\_\_ Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons  
 10 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Produced: \_\_\_\_\_ Gallons  
 Well Purged Dry?  Yes  No

Water Level Serial #: SOLING # 532 191 Water Quality Probe Type and Serial #: ATL00 # 454596

### WATER QUALITY INDICATOR PARAMETERS

elapsed time (mins)

Sampling Stage	Time (min)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	14:53	—	7.98	—	14.06	7.16	910.55	5.33	10.14	166.9	Clear
purge	14:59		10.26	2.28	14.18	7.17	1,194.7	6.26	0.00	167.4	
	15:02		10.63	0.37							
	15:05		11.02	0.39							
	15:08		11.40	0.38							
	15:11		11.79	0.39							
	15:14		12.08	0.39							
	15:17		12.58	0.40							

DATA IN VA-Site

SAMPLE ID: MW-203 @ 15:33.

NOTE: ALL PARAMETERS STABLE EXCEPT CONDUCTIVITY, RSD LIKELY FALSELY ELEVATED DUE TO BUBBLES IN FLOW-TURN CELL.

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 1940102653 Task #: 1000: LBR Start Date: 11/16/2022 Time: 1450  
 Field Personnel: AFH, CAL Finish Date: \_\_\_\_\_ Time: \_\_\_\_\_

### WELL INFORMATION

Well ID: MW-203  
 Casing ID: 2 inches

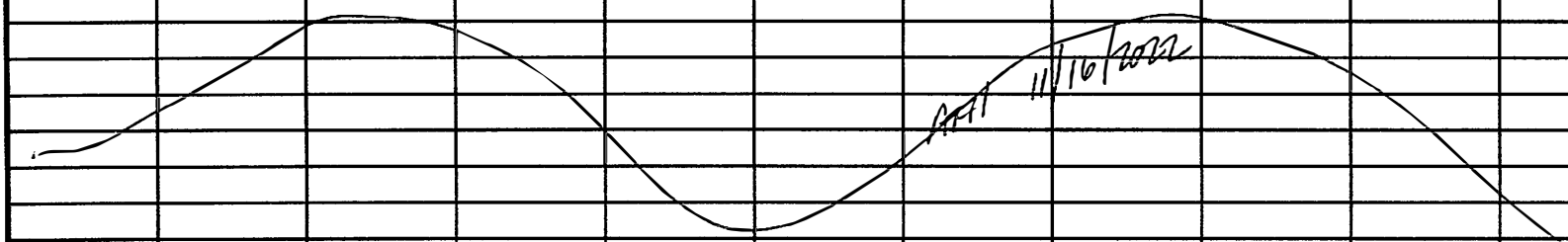
### EVENT TYPE

Well Development  Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

el. time (mins)	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
27:00	Purge	15:20		13.22	0.64							Clear
30:00		15:23		13.80	0.58							
33:00		15:26		14.19	0.39							
36:00		15:29		14.70	0.51							
39:00	↓ (Stable)	15:32	2.75 gal	15.20	0.50	14.31	7.26	563.23	7.05	0.00	170.4	
		15:33		SAMPLED WELL - ALL P's stable except conductivity								

DATA IN WELL SITE



### NOTES (continued)

☑ SAMPLE ID: MW-203 @ 15:33.

FINAL WL = 17.51 (AFTER SAMPLING DONE)  
 BDL

### ABBREVIATIONS

Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius
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## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 11/16/22 Time: 1530  
 Field Personnel: KEH CAZ Finish Date: \_\_\_\_\_ Time: 1618

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
(Shut up) Well ID: <u>MW-193</u> Casing ID: <u>2</u> Inches Screen Interval: <u>~32-42' BGS</u> Borehole Diameter: <u>6</u> Inches Filter Pack Interval: _____	<input type="checkbox"/> Well Development <input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling <input type="checkbox"/> Well Volume Approach Sampling <input type="checkbox"/> Other (Specify below)	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump Bailer Type: n/a Pump Type and Serial #: <u>Alexis Peristaltic (S/N: 24345)</u> Tube/Pump Intake Depth: <u>~40' BTOC</u> Stabilized Pumping Rate: <u>120 ml/min</u>

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION			
	INITIAL		FINAL		Volume Calculation Type:		Standing Water Column: _____ feet
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	<input type="checkbox"/> Well Casing	<input type="checkbox"/> Borehole	
LNAPL	_____	_____	_____	_____	Volume Per Foot: _____		1 Well Volume: _____ Gallons
Groundwater	<u>9.09</u>	<u>1530</u>	<u>9.60</u>	<u>1602</u>	_____		5 Well Volumes: _____ Gallons
DNAPL	_____	_____	_____	_____	Total Volumes Produced: _____ Gallons		10 Well Volumes: _____ Gallons
Casing Base	_____	_____	_____	_____	Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No		

Water Level Serial #: 3010-1237 SOUNST Water Quality Probe Type and Serial #: 454579 AT600

### WATER QUALITY INDICATOR PARAMETERS

Elapsed Time	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
0:00	initial	<u>1532</u>	<u>0</u>	<u>9.09</u>	<u>—</u>	<u>12.25</u>	<u>7.22</u>	<u>1078.0</u>	<u>2.28</u>	<u>27.82</u>	<u>-69.8</u>	<u>clear</u>
6:00	purge	<u>1538</u>		<u>9.55</u>	<u>0.46</u>	<u>13.39</u>	<u>7.04</u>	<u>999.18</u>	<u>0.25</u>	<u>0.92</u>	<u>-69.4</u>	<u>—</u>
7:00		<u>1541</u>		<u>9.59</u>	<u>0.04</u>							
12:00		<u>1544</u>		<u>9.60</u>	<u>0.01</u>							
15:00		<u>1547</u>		<u>9.60</u>	<u>—</u>							
18:00		<u>1550</u>		<u>9.60</u>	<u>—</u>							
21:00		<u>1553</u>		<u>9.60</u>	<u>—</u>							
24:00		<u>1556</u>		<u>9.60</u>	<u>—</u>							

SAMPLE ID: MW-193 @ 16:03

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 16401021653 Task #: 1000-LBR Start Date: 11/16/12 Time: 1530  
 Field Personnel: AFF CAC Finish Date: \_\_\_\_\_ Time: 1628

### WELL INFORMATION

Well ID: MW-193  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

2700  
3000

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
	<u>1559</u>		<u>9.60</u>	<u>—</u>	<u>13.42</u>	<u>7.02</u>	<u>984.50</u>	<u>0.10</u>	<u>0.00</u>	<u>-76.5</u>	<u>Clear</u>
<u>Stable</u>	<u>1602</u>	<u>1.5</u>	<u>9.60</u>	<u>—</u>							<u>Clear</u>
	<u>sample @ 1603</u>										

### NOTES (continued)

sample MW-193 on 11/16/12 @ 1603  
stable parameters except for temperature

### ABBREVIATIONS

Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius
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## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 11/16/2022 Time: 16:20  
 Field Personnel: AFH, CAL Finish Date: 11/16/2022 Time: 17:57

### WELL INFORMATION

Well ID: MW-306  
 Casing ID: 2 Inches  
 Screen Interval: 75-85 bgs  
 Borehole Diameter: ? Inches  
 Filter Pack Interval: ?

### EVENT TYPE

- Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: EXISTING (DEDICATED) BLADDER Pump w/ MP-50  
 Tube/Pump Intake Depth: ~85' BTOC  
 Stabilized Pumping Rate: 100 ml/min

### DEPTH MEASUREMENTS

### VOLUME CALCULATION AND PRODUCTION INFORMATION

	INITIAL		FINAL		Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole	
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	Volume Per Foot:	Standing Water Column: _____ feet
LNAPL	<u>N/A</u>				<u>N/A</u>	<u>N/A</u>
Groundwater	<u>17.89</u>	<u>16:20</u>	<u>27.42</u>	<u>17:57</u>		
DNAPL	<u>N/A</u>					
Casing Base	<u>N/A</u>					

1 Well Volume: \_\_\_\_\_ Gallons    3 Well Volumes: \_\_\_\_\_ Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons    10 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Produced: \_\_\_\_\_ Gallons  
 Well Purged Dry?  Yes  No

Water Level Serial #: SOLINST 532181 Water Quality Probe Type and Serial #: AT600 #454596

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>16:24</u>	<u>—</u>	<u>17.89</u>	<u>—</u>	<u>10.48</u>	<u>11.17</u>	<u>755.63</u>	<u>3.41</u>	<u>16.80</u>	<u>134.1</u>	<u>Clear</u>
purge	<u>16:30</u>		<u>19.22</u>	<u>1.33</u>	<u>10.66</u>	<u>11.12</u>	<u>792.72</u>	<u>1.58</u>	<u>2.54</u>	<u>124.1</u>	
	<u>16:33</u>		<u>19.55</u>	<u>0.33</u>					<u>0.00</u>		
	<u>16:36</u>		<u>19.86</u>	<u>0.31</u>					<u>0.00</u>		
	<u>16:39</u>		<u>20.18</u>	<u>0.32</u>					<u>0.00</u>		
	<u>16:42</u>		<u>20.51</u>	<u>0.33</u>					<u>0.00</u>		
	<u>16:45</u>		<u>20.80</u>	<u>0.29</u>					<u>0.00</u>		
	<u>16:48</u>		<u>21.10</u>	<u>0.30</u>					<u>0.00</u>		

elapsed time  
 0  
 6  
 9  
 12  
 15  
 18  
 21  
 24

### NOTES

SAMPLE ID: MW-306 @ 17:04.

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: UISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 11/16/2022 Time: 1620  
 Field Personnel: AFH, CAT Finish Date: 11/16/2022 Time: ~~1757~~

1757

### WELL INFORMATION

Well ID: MW-306  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

elapsed  
Time

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Purge	1651		21.40	0.30	DATA IN Well-Site						Clear
	1654		21.71	0.31							
	1657		22.03	0.32							
	1700		22.30	0.27							
▼ (Stable)	1703	1 gal	22.57	0.27	10.50	10.32	592.23	0.57	0.00	121.6	Clear
	1704	SAMPLED WELL, ALL PARAMETERS STABLE									

### NOTES (continued)

☑ SAMPLE ID: MW-306 @ 17:04

### ABBREVIATIONS

Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius
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☑ LABWARE FOR SAMPLE: (4 BOTTLES TOTAL)  
 1 - 1 Liter Plastic (Unpres)  
 2 - 1 Liter Plastic (HNO<sub>3</sub>)  
 1 - 250 ml Plastic (HNO<sub>3</sub>)



## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 19401071053 Task #: 1000-LBR Start Date: 11/17/22 Time: 0753  
 Field Personnel: APK, CAR Finish Date: \_\_\_\_\_ Time: 0940

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-394</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>+70-80' bgs</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>ALEXIS PENSTALTI (# 24345)</u>
Borehole Diameter: <u>6</u> Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>~78' BTOC</u>
Filter Pack Interval: _____		Stabilized Pumping Rate: <u>1.20 ml/min</u>

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION				
	INITIAL		FINAL					
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	Volume Calculation Type: <input type="checkbox"/> Well Casing <input checked="" type="checkbox"/> Borehole			
LNAPL					Volume Per Foot: _____			
Groundwater	<u>6.32</u>	<u>753</u>	<u>11.97</u>	<u>400<sup>0940</sup></u>	Standing Water Column: _____ feet			
DNAPL					1 Well Volume: _____ Gallons 3 Well Volumes: _____ Gallons			
Casing Base					5 Well Volumes: _____ Gallons 10 Well Volumes: _____ Gallons			
					Total Volumes Produced: _____ Gallons			
					Well Purged Dry? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			

Water Level Serial #: 3010-1237 SOLAIST Water Quality Probe Type and Serial #: 45457a AT600

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<u>0:00</u> initial	<u>757</u>	<u>0</u>	<u>6.32</u>	<u>0</u>	<u>10.53</u>	<u>7.72</u>	<u>4009.8</u>	<u>4.14</u>	<u>2.20</u>	<u>33.9</u>	<u>clear</u>
<u>6:00</u> purge	<u>803</u>		<u>7.56</u>	<u>1.24</u>	<u>10.39</u>	<u>7.88</u>	<u>4183.8</u>	<u>0.25</u>	<u>4.58</u>	<u>-86.4</u>	<u>—</u>
<u>9:00</u>	<u>806</u>		<u>8.01</u>	<u>0.45</u>	<b>DATA IN VU-SITU</b>						
<u>12:00</u>	<u>809</u>		<u>8.32</u>	<u>0.31</u>							
<u>15:00</u>	<u>812</u>		<u>8.67</u>	<u>0.35</u>							<u>clear</u>
<u>18:00</u>	<u>815</u>		<u>9.0</u>	<u>0.33</u>							
<u>21:00</u>	<u>818</u>		<u>9.32</u>	<u>0.32</u>							
<u>24:00</u>	<u>821</u>		<u>9.63</u>	<u>0.31</u>							

☑ SAMPLE ID: MW-394 @ 09:04.

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN TP Client: VISTRA  
 Project Number: 11640102653 Task #: 1000.LBR Start Date: 11/17/22 Time: 0753  
 Field Personnel: AFH CAC Finish Date: 11/17/22 Time: 0940

### WELL INFORMATION

Well ID: MW-394  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

elapsed time  
 27:00  
 30:00  
 33:00  
 36  
 39:00  
 42  
 45  
 48  
 51:00  
 54  
 57  
 60:00  
 63:00

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
PURGE	824		9.91	0.28							
	827		10.22	0.31							
	830		10.53	0.31							
	833		10.84	0.31							
	836		11.15	0.31							
	839		11.40	0.25							
	842		11.71	0.31							
	845		12.02	0.31							
	848		12.34	0.32							
	851		12.65	0.31							
	854		12.97	0.32							
	857		12.97	0.00							
Stable	900	2 gal	12.97	0.00	9.12	7.93	3,344.1	0.19	82.93	-172.6	Clear
<del>Stable</del>	<del>903</del>	<del>CAC</del>	<del>11/17/22</del>								

DATA IN VU-SITU

### Sample MW-394 @ 904 NOTES (continued)

Sample MW-394 on 11/17/22 @ 904

stable parameters except turbidity, Temp. & conductivity.

### ABBREVIATIONS

Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius
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## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 14401021053 Task #: \_\_\_\_\_ Start Date: 11/17/22 Time: 942  
 Field Personnel: AEH CAC Finish Date: \_\_\_\_\_ Time: 1111

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-194</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>~20-30' BGS</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>Alexis Peristaltic #24345</u>
Borehole Diameter: <u>.6</u> Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>~28' BTOC</u>
Filter Pack Interval: _____		Stabilized Pumping Rate: <u>110 mL/min</u>

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION				
	INITIAL		FINAL					
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole			
LNAPL					Volume Per Foot: _____			
Groundwater	<u>8.76</u>	<u>946</u>	<u>17.72</u>	<u>1037</u>	Standing Water Column: _____ feet			
DNAPL					1 Well Volume: _____ Gallons 3 Well Volumes: _____ Gallons			
Casing Base					5 Well Volumes: _____ Gallons 10 Well Volumes: _____ Gallons			
					Total Volumes Produced: _____ Gallons			
					Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No			

Water Level Serial #: 2010-1277 Water Quality Probe Type and Serial #: 454579

### WATER QUALITY INDICATOR PARAMETERS

el. time	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
0:00	initial	946	0	8.76	0	11.89	7.03	976.81	0.83	0.00	-23.7	clear
6:00	purge	952	-	9.11	0.35	12.42	6.97	965.39	0.11	0.00	-12.8	-
9		955		9.79	0.68							
12		958		10.39	0.60							
5u		1001		11.02	0.63							
		1004		11.44	0.62							
		1007		12.24	0.60							
24:00		1010		12.71	0.52							

SAMPLE ID: MW-194 @ 10:38

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1640102653 Task #: 1006.LBR Start Date: 11/17/22 Time: 942  
 Field Personnel: APR CAC Finish Date: 11/17/22 Time: 1111

### WELL INFORMATION

Well ID: MW-194  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
27:00	Purge 1013		13.35	0.59							Clear
30	1016		13.95	0.60							
33	1019		14.40	0.45							
36	1022		15.0	0.60							
39	1025		15.52	0.52							
42:00	1028		16.1	0.58							
45	1031		16.70	0.60					14.56		
48	Stable 1034		17.2	0.50	12.25				14.81		Clear
51	Stable 1037	2.5	17.72	0.52	12.19	7.09	908.37	4.04	14.35	4.7	Clear
	Sample @ 1038										
60:00											

*Elapsed time*

*APR 11/17/22*

### NOTES (continued)

sample MW-194 @ 1038 on 11/17/22  
 stable parameters except temperature

### ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTR  
 Project Number: 1940102653 Task #: 1000-LBR Start Date: 11/17/2022 Time: 0920  
 Field Personnel: AFH, CAZ Finish Date: \_\_\_\_\_ Time: 1140

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-307</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>~62-72</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>DED SAMPLE PRO 1.75" w/ MP-SD Controller</u>
Borehole Diameter: <u>?</u> Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>~67' BGS</u>
Filter Pack Interval: <u>?</u>		Stabilized Pumping Rate: <u>120 ml/min</u>

DEPTH MEASUREMENTS					VOLUME CALCULATION AND PRODUCTION INFORMATION				
	INITIAL		FINAL						
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole				
LNAPL	<u>N/A</u>				Volume Per Foot: _____				
Groundwater	<u>7.53</u>	<u>0920</u>	<u>23.43</u>	<u>1140</u>	Standing Water Column: <u>N/A</u> feet				
DNAPL	<u>N/A</u>				1 Well Volume: _____ Gallons 3 Well Volumes: _____ Gallons				
Casing Base	<u>73.8</u>	<u>0920</u>	<u>73.8</u>	<u>1140</u>	5 Well Volumes: _____ Gallons 10 Well Volumes: _____ Gallons				
					Total Volumes Produced: _____ Gallons				
					Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No				

Water Level Serial #: SCINST # 532181 Water Quality Probe Type and Serial #: AT 600 # 454596

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>0926</u>	<u>—</u>	<u>7.53</u>	<u>—</u>	<u>12.61</u>	<u>9.78</u>	<u>1675.9</u>	<u>4.75</u>	<u>68.33</u>	<u>246.4</u>	<u>Slightly cloudy</u>
purge	<u>0932</u>		<u>8.50</u>	<u>0.97</u>	<u>13.65</u>	<u>9.79</u>	<u>1628.5</u>	<u>8.71</u>	<u>64.77</u>	<u>234.0</u>	<u>" "</u>
	<u>0935</u>		<u>8.96</u>	<u>0.46</u>							<u>" "</u>
	<u>0938</u>		<u>9.40</u>	<u>0.44</u>							<u>" "</u>
	<u>0941</u>		<u>9.85</u>	<u>0.45</u>							<u>" "</u>
	<u>0944</u>		<u>10.31</u>	<u>0.46</u>							<u>" "</u>
	<u>0947</u>		<u>10.76</u>	<u>0.45</u>							<u>" "</u>
	<u>0950</u>		<u>11.21</u>	<u>0.45</u>							<u>" "</u>

SAMPLE ID: MW-307 @ 10:54 + DUP-02 @ 11:05.

Note: No existing bladder pump observed in well, used rental bladder pump.

Note: PDO readings likely falsely elevated due to bubbles in flow-through cell, too many to remove. All readings/parameters stable at sample collection time except turbidity.

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP. Client: VISTRA  
 Project Number: 1940102653 Task #: 1000-LBR Start Date: 11/17/2022 Time: 0920  
 Field Personnel: AFH, CAL Finish Date: \_\_\_\_\_ Time: 1140

### WELL INFORMATION

Well ID: MIN-307  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

Elapsed time

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
27 Purge	0953	<del>11.6</del> <sup>11.6</sup>	11.66	0.45							Slightly cloudy
30	0956		12.10	0.44							
33	0959		17.54	0.44							
36	1002		12.98	0.44							
75:00 Purge	1041		18.16	5.18							Clear
78:00	1044		18.42	0.26			1577.2				Clear
81:00	1047		18.69	0.27	13.83	9.46	1569.2	10.43	34.69	197.7	Clear
84:00	1050		18.96	0.27	13.88	9.44	1562.1	10.64	37.30	197.4	Clear
87:00 (stable)	1053	2.8 gal	19.23	0.27	13.82	9.40	1562.3	10.49	49.28	198.0	Clear
	1054	SAMPLED WELL, ALL PARAMETERS STABLE EXCEPT TURBIDITY									
AFH 11/17/2022											

### NOTES (continued)

### ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 1040102653 Task #: 1000.LBR Start Date: 11/17/22 Time: 1130  
 Field Personnel: AFH CAC Finish Date: \_\_\_\_\_ Time: 1235

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-158R</u> Casing ID: <u>2</u> Inches Screen Interval: <u>~10-20</u> BTOC Borehole Diameter: <u>6</u> Inches Filter Pack Interval: _____	<input type="checkbox"/> Well Development <input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling <input type="checkbox"/> Well Volume Approach Sampling <input type="checkbox"/> Other (Specify below)	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump Bailer Type: <u>n/a</u> Pump Type and Serial #: <u>ALUMIS PERISTALTIC #24345</u> Tube/Pump Intake Depth: <del>_____</del> <u>~18</u> BTOC Stabilized Pumping Rate: <u>100</u>

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION				
	INITIAL		FINAL					
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole			
LNAPL					Volume Per Foot: _____			
Groundwater	<u>13.102</u>	<del>1157</del>	<u>16.11</u>	<u>1235</u>	Standing Water Column: _____ feet			
DNAPL		<u>1138</u>			1 Well Volume: _____ Gallons <del>3 Well Volumes: _____ Gallons</del>			
Casing Base					5 Well Volumes: _____ Gallons <del>10 Well Volumes: _____ Gallons</del>			
					Total Volumes Produced: _____ Gallons			
					Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No			

Water Level Serial #: SOLINST # 363824 Water Quality Probe Type and Serial #: ATL600

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>Well</u>	<u>went dry</u>	<u>sample taken</u>	<u>immediately</u>							
purge		<u>- no production</u>	<u>logged as</u>	<u>water table began dropping</u>					<u>immediately</u>		

Well Dry. Sample at 1200.  
 Sample MW-158R @ 1200 on 11/17/22





## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 11/17/2022 Time: 1215  
 Field Personnel: AFH, CAC Finish Date: 11/17/2022 Time: 1310

### WELL INFORMATION

(Strike up) Well ID: MW-358  
 Casing ID: 2 Inches  
 Screen Interval: ~ 80-90' bgs  
 Borehole Diameter: 6 Inches  
 Filter Pack Interval: ~ 76-90

### EVENT TYPE

- Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: DED SAMPLE PRO BLADDER Pump w/ MP-50 Controller  
 Tube/Pump Intake Depth: 87' - BTDC  
 Stabilized Pumping Rate: 120 ml/min

### DEPTH MEASUREMENTS

### VOLUME CALCULATION AND PRODUCTION INFORMATION

	INITIAL		FINAL		Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole
	Depth FT BTDC	Time (24-Hour)	Depth FT BTDC	Time (24-Hour)	
LNAPL	<u>N/A</u>				Volume Per Foot: <u>N/A</u> feet
Groundwater	<u>77.45</u>	<u>1215</u>	<u>84.35</u>	<u>1310</u>	Standing Water Column: <u>N/A</u> feet
DNAPL	<u>N/A</u>				1 Well Volume: _____ Gallons 3 Well Volumes: _____ Gallons
Casing Base	<u>92.00</u>	<u>1215</u>	<u>92.00</u>	<u>1310</u>	5 Well Volumes: _____ Gallons 10 Well Volumes: _____ Gallons
					Total Volumes Produced: _____ Gallons
					Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No

Water Level Serial #: SOLIST # 532181 Water Quality Probe Type and Serial #: AT600 # 454 596

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>12:27</u>	—	<u>77.45</u>	—	<u>12.74</u>	<u>7.86</u>	<u>4652.1</u>	<u>0.69</u>	<u>510.87</u>	<u>203.8</u>	<u>Cloudy</u>
purge	<u>12:33</u>		<u>79.20</u>	<u>1.75</u>	<u>13.30</u>	<u>7.85</u>	<u>4378.3</u>	<u>0.34</u>	<u>338.73</u>	<u>201.7</u>	<u>Cloudy</u>
	<u>12:36</u>		<u>79.61</u>	<u>0.41</u>	<u>13.34</u>	<u>7.83</u>	<u>4363.7</u>	<u>0.30</u>	<u>260.77</u>	<u>201.2</u>	<u>Cloudy</u>
(Stable)	<u>12:39</u>	<u>ga</u>	<u>80.04</u>	<u>0.43</u>	<u>13.28</u>	<u>7.83</u>	<u>4360.0</u>	<u>0.26</u>	<u>286.15</u>	<u>199.5</u>	<u>Slightly Cloudy</u>
<u>SAMPLED WELL, ALL P's Stable except Turbidity</u>											

SAMPLE ID: MW-358 @ 12:40.

NOTE: NO EXISTING PUMP (DEDICATED) IN WELL - USED RENTAL BLADDER PUMP FOR PURGING AND SAMPLING.

NOTE: MORE PURGING WOULD HAVE PURGED FOR LONGER PERIOD OF TIME, BUT WL WAS DROPPING, WELL SAMPLED EARLIER TO AVOID GOING DRY

DATA IN SITU

ELAPSED TIME  
0:00  
6:00  
9:00  
12:00  
N/A

est. →



## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN POWER PLANT Client: VISTRA  
 Project Number: 110401071053 Task #: 1000-LBR Start Date: 11/17/22 Time: 1250  
 Field Personnel: AFH LAC Finish Date: 11/17/22 Time: 1400

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-258</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>~40-50' bgs</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>Alexis Penstath (#24345)</u>
Borehole Diameter: <u>6</u> Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>~47' BTOL</u>
Filter Pack Interval: _____		Stabilized Pumping Rate: <u>100 ml/min</u>

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION				
	INITIAL		FINAL		Volume Calculation Type: <input type="checkbox"/> Well Casing <input checked="" type="checkbox"/> Borehole			
	Depth FT BTOL	Time (24-Hour)	Depth FT BTOL	Time (24-Hour)	Volume Per Foot: _____			
LNAPL	<u>N/A</u>				Standing Water Column: _____ feet			
Groundwater	<u>14.15</u>	<u>1250</u>	<u>24.45</u>	<u>1400</u>	1 Well Volume: _____ Gallons	3 Well Volumes: _____ Gallons		
DNAPL	<u>N/A</u>				5 Well Volumes: _____ Gallons	10 Well Volumes: _____ Gallons		
Casing Base	<u>N/A</u>				Total Volumes Produced: _____ Gallons			
					Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No			

Water Level Serial #: SOLINST # 363824 Water Quality Probe Type and Serial #: AT600 # 454579

### WATER QUALITY INDICATOR PARAMETERS

ELAPSED TIME

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	1251	0	14.15	0	11.56	8.63	1403.8	2.45	355.32	2.3	silty black
purge	1257	-	15.94	1.79	11.02	8.67	1409.6	0.35	22,769*	-60	clear*
	1300		16.40	0.46							clear
	1303		16.80	0.40							
	1306		17.20	0.40							
	1309		17.60	0.40							
	1312		18.00	0.40							
	1315		18.40	0.40							

DATA IN WELL-SITU

\* turbidity likely inaccurate. No bubbles in aqua troll. Clear GW in flow-through cell

■ SAMPLE ID: MW-258 @ 13:22.

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN FF Client: VISTRA  
 Project Number: 11040102653 Task #: 1000.LBR Start Date: 11/17/22 Time: 1250  
 Field Personnel: AFH CAC Finish Date: 11/17/22 Time: 1400

### WELL INFORMATION

Well ID: MW-258  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  
 Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

Elapsed time

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
27:00	1318		18.80	0.40	11.64	8.67	1410.4	0.17	961.17	-106.9	<del>Clear</del>
30:00	1321	1.25	19.20	0.40	11.62	8.67	1406.1	0.17	961.17	-111.3	<del>Clear</del>
Sampled due to draw down of DW, every parameter stable except turbidity.											
	Sample at		1322						502.03		

Clear

### NOTES (continued)

Sample MW-258 @ 1322 on 11/17/22.  
 Sampling due to draw down (DW) at well.

### ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius





## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 11/17/2022 Time: 1600  
 Field Personnel: AFH, CAL Finish Date: \_\_\_\_\_ Time: 1700

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-356</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>~56-66</u> BGS	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>EXISTING BLADDER PUMP w/ MP-50 controller</u>
Borehole Diameter: <u>?</u> Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>~65' BTOL</u>
Filter Pack Interval: _____		Stabilized Pumping Rate: <u>140 ml/min</u>

DEPTH MEASUREMENTS					VOLUME CALCULATION AND PRODUCTION INFORMATION				
	INITIAL		FINAL		Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole Volume Per Foot: _____ Standing Water Column: _____ feet 1 Well Volume: _____ Gallons    3 Well Volumes: _____ Gallons 5 Well Volumes: _____ Gallons    10 Well Volumes: _____ Gallons Total Volumes Produced: _____ Gallons Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No				
	Depth FT BTOL	Time (24-Hour)	Depth FT BTOL	Time (24-Hour)					
LNAPL	<u>N/A</u>				<del>                             (This section is crossed out with a large 'X' and 'N/A' written over it.)                         </del>				
Groundwater	<u>4.42</u>	<u>16:00</u>	<u>9.92</u>	<u>17:00</u>					
DNAPL	<u>N/A</u>								
Casing Base	<u>N/A</u>								

Water Level Serial #: SUNST #537.181 Water Quality Probe Type and Serial #: AT 600 #454.596

### WATER QUALITY INDICATOR PARAMETERS

Elapsed Time	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<u>0:00</u>	<u>initial</u>	<u>16:04</u>	<u>—</u>	<u>4.42</u>	<u>—</u>	<u>13.76</u>	<u>7.91</u>	<u>1315.3</u>	<u>2.93</u>	<u>1.32</u>	<u>137.8</u>	<u>Clear</u>
<u>6:00</u>	<u>purge</u>	<u>16:10</u>		<u>5.78</u>	<u>1.36</u>	<u>13.86</u>	<u>7.86</u>	<u>1324.1</u>	<u>0.84</u>	<u>11.94</u>	<u>138.2</u>	
<u>9:00</u>		<u>16:13</u>		<u>6.01</u>	<u>0.23</u>							
<u>12:00</u>		<u>16:16</u>		<u>6.25</u>	<u>0.24</u>							
<u>15:00</u>		<u>16:19</u>		<u>6.50</u>	<u>0.25</u>					<u>0.00</u>		
<u>18:00</u>	<u>(Stable)</u>	<u>16:22</u>	<u>0.75</u>	<u>6.75</u>	<u>0.25</u>	<u>13.76</u>	<u>7.82</u>	<u>1248.0</u>	<u>0.36</u>	<u>0.00</u>	<u>137.9</u>	<u>Clear</u>
		<u>16:23</u>	<u>- SAMPLED WELL, ALL P'S STABLE.</u>									

SAMPLE ID: MW-356 @ 16:23.  
 - all parameters stable @ time of sampling.





## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 11/17/22 Time: 1542  
 Field Personnel: AFH CAC Finish Date: \_\_\_\_\_ Time: 1652

EXISTING bladder pump in well

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-370</u> Casing ID: <u>2</u> Inches Screen Interval: <u>?</u> Borehole Diameter: <u>?</u> Inches Filter Pack Interval: <u>?</u>	<input type="checkbox"/> Well Development <input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling <input type="checkbox"/> Well Volume Approach Sampling <input type="checkbox"/> Other (Specify below)	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump Bailer Type: n/a Pump Type and Serial #: <u>Well Wizard (20789); Bladder Pump</u> Tube/Pump Intake Depth: <u>~58 BDL</u> Stabilized Pumping Rate: <u>100 mL/MIN</u>

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION			
	INITIAL		FINAL		Volume Calculation Type:		Standing Water Column: _____ feet
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)	<input type="checkbox"/> Well Casing	<input checked="" type="checkbox"/> Borehole	
LNAPL	<u>N/A</u>				Volume Per Foot: _____		
Groundwater	<u>19.02</u>	<u>1542</u>	<u>21.11</u>	<u>1629</u>	1 Well Volume: _____ Gallons		3 Well Volumes: _____ Gallons
DNAPL	<u>N/A</u>				5 Well Volumes: _____ Gallons		10 Well Volumes: _____ Gallons
Casing Base					Total Volumes Produced: _____ Gallons		
Water Level Serial #: <u>3010-1237 SOLANSY</u>				Water Quality Probe Type and Serial #: <u>#454579 AT600</u>			

### WATER QUALITY INDICATOR PARAMETERS

Elapsed Time	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
0:00	initial	1547	<u>0</u>	19.02	<u>0</u>	14.99	7.80	<u>1015.1</u>	5.22	62.70	74.9	clear
0:60	purge	1553		20.71	1.69	13.21	7.82	<u>6670.5</u>	1.25	27.08	63.4	-
09:00		1556		20.84	0.13							
1200		1559		20.89	0.05							
15:00		1602		20.90	0.01							
1800		1605		20.90	0.00							
2100		1608		21.0	0.10							
2400		1611		21.0	0.0							

DATA IN VU-SITU.

SAMPLE ID: MW-370 @ 16:30.



## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 1940102653 Task #: 1000-LBR Start Date: 11/17/2022 Time: 17:50  
 Field Personnel: AFI, LAL Finish Date: \_\_\_\_\_ Time: 18:45

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-204</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailor <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailor Type: <u>n/a</u>
Screen Interval: <u>?</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>EXISTING BLADDER PUMP (IN WELL)</u>
Borehole Diameter: <u>?</u> Inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>~ 70'</u>
Filter Pack Interval: <u>?</u>		Stabilized Pumping Rate: <u>120 ml/min</u>

Dedicated Pump.  
w/ MP50 controller

DEPTH MEASUREMENTS					VOLUME CALCULATION AND PRODUCTION INFORMATION				
	INITIAL		FINAL		Volume Calculation Type:	Volume Per Foot:	Standing Water Column:	1 Well Volume:	5 Well Volumes:
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)					
LNAPL	<u>N/A</u>								
Groundwater	<u>12.51</u>	<u>17:50</u>	<u>26.12</u>	<u>18:45</u>					
DNAPL	<u>N/A</u>								
Casing Base	<u>N/A</u>								

Water Level Serial #: SOLMAST #363824 Water Quality Probe Type and Serial #: AT600 #454596

### WATER QUALITY INDICATOR PARAMETERS

elapsed time	Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
0:00	initial	17:54	—	12.51	—	12.83	7.85	1252.7	1.01	19.58	132.6	Clear
6:00	purge	18:00		14.59	2.08	12.94	7.80	1339.2	1.29	72.03	128.9	
9:00		18:03		15.63	1.04							
12:00		18:06		16.68	1.05							
15:00		18:09		17.71	1.04							
18:00		18:12		18.75	1.04							
21:00		18:15		19.78	1.03							
24:00		18:18		20.53	0.75							

DATA IN VA-SITE

☑ SAMPLE ID: MW-204 - collected @ 18:29.

\* DTB = 75.1' BTOC at 17:50 \*

☑ JARS FILLED =

- 1- 1 liter plastic (unpreserved)
- 1- 250 ml plastic (HNO<sub>3</sub>)

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN PP Client: VISTRA  
 Project Number: 194 902653 Task #: 1000-LBR Start Date: 11/17/2022 Time: 17:50  
 Field Personnel: AFH, CAR Finish Date: \_\_\_\_\_ Time: 18:45

### WELL INFORMATION

Well ID: MW-204  
 Casing ID: 2 inches

### EVENT TYPE

Well Development  Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  Other (Specify): \_\_\_\_\_

### WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<i>elapsed time</i> 27:11	Purge		21.24	0.71	DATA IN	VU	SITU				Clear
30:11			21.94	0.70							Clear
33:11	↓ stable	1.2 gal	22.64	0.70	13.70	7.82	1337.4	0.35	44.60	116.4	Clear
		18:29	- SAMPLED WELL, all parameters stable.								
<del> <div style="text-align: center;">AFH 11/17/22</div> </del>											

### NOTES (continued)

SAMPLE ID: MW-204 collected @ 18:29

### ABBREVIATIONS

Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured	ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius
---	---



**Sample Control  
Log**

# Sample Control Log

Project Name: BALDWIN FP - NOVEMBER 2022 <sup>845</sup> GW SAMPLING Analytical Laboratory: TEKLAB  
 Project ID: 1940102653 Geotechnical Laboratory: n/a  
 Task ID: WOOD, LBR Field Staff ID(s): AFH, CAC

Month (2-digit)	Date (2-digit)	Year (2-digit)	Sample Number (3-digit)	Unique Sample ID	Sample Media	Sample Location	Sample Depth (feet)	QC Sample Information (duplicate, blank, etc...)	COC Number	Notes (turnaround time, time handling notes)
11	15	22	N/A	XPW06	GW	XPW06	8'	—	N/A	09:29 STD TAT
11	15	22		XPW01	GW	XPW01	9.5'	MS/MSD		11:23
11	15	22		XPW05	GW	XPW05	26.95' BTOL	—		13:43
11	15	22		XPW02	GW	XPW02	11' bto	—		15:33
11	15	22		DUP-01	GW	XPW02	11' bto	DUP #1		15:43
11	15	22		XPW04	GW	XPW04	16' bto	—		17:10
11	15	22		EB-01	DI	—	—	RINSE BLANK		1800
11	16	22		TPZ-164	GW	TPZ-164	7.5' BTOL	—		0944 STD TAT
11	16	22		MW-192	GW	MW-192	27.5' BTOL	—		1128
11	16	22		MW-392	GW	MW-392	82' BTOL	—		1304
11	16	22		MW-305	GW	MW-305	17' bto	—		1415
11	16	22		MW-393	GW	MW-393	75' BTOL	—		1452
11	16	22		MW-203	GW	MW-203	27' BTOL	—		1533
11	16	22		MW-193	GW	MW-193	40' bto	—		1603
11	16	22		MW-306	GW	MW-306	85' BTOL	—		1704

SUBMITTED TO LAB ON 11/16/22



# Sample Control Log

Project Name: BALDWIN PP-NOV. 2022 845 GW SAMPLING

Analytical Laboratory: Tedical

Project ID: 1940102563

Geotechnical Laboratory: n/a

Task ID: 1000.L13R

Field Staff ID(s): AFH, CAC

Month (2-digit)	Date (2-digit)	Year (2-digit)	Sample Number (3-digit)	Unique Sample ID	Sample Media	Sample Location	Sample Depth (feet)	QC Sample Information (duplicate, blank, etc...)	COC Number	Notes (turnaround time, handling notes)
11	16	22	N/A	EB-02	DI	—	—	RINSE BLANK	1 - 250 ml plastic w/ HNO <sub>3</sub>	1845 STD TA
11	17	22		MW-394	GW	MW-394	78' BTL	—	N/A	0904
11	17	22		MW-194	GW	MW-194	28' BTL	—		1038
11	17	22		MW-307	GW	MW-307	67' bgs	—		1054
11	17	22		DUP-02	GW	MW-307	67' bgs	DUP # 2		1105
11	17	22		MW-158R	GW	MW-158R	18' BTL	—		1200
11	17	22		MW-358	GW	MW-358	87' BTL	—		1240
11	17	22		MW-258	GW	MW-258	47' BTL	—		1322
11	17	22		MW-304	GW	MW-304	55' BTL	—		1435
11	17	22		MW-356	GW	MW-356	65' BTL	—		16:23
11	17	22		MW-370	GW	MW-370	58' BTL	—		1630
11	17	22		MW-204	GW	MW-204	70' BTL	—		18:29 STD TA
11	17	22		EB-03	DI	—	—	RINSE BLANK	1 - 250 ml Plastic w/ HNO <sub>3</sub>	19:00
					AFH	11/17/2022		N/A		

SUB. TO LAB ON 11/16

SUBMITTED TO LAB ON 11/17/2022





## Activity Summary Report



# Activity Summary Report

Date(s): 11/14 - 11/17/2022

Page 1 of 3

Project:	BALDWIN PP 845 GW SAMPLING - NOVEMBER 2022
Project #:	1940102653
Task #:	1000 - LBR
Location:	BALDWIN, IL

Date	Arrival Time	Departure Time	Temperature AM/PM	Cloud Cover AM/PM	Wind Conditions AM/PM
11/14	1200	1900	LOW 40's	FAIR/Cloudy	10mph - E
11/15	0700	1900	High 30's/LOW 40's	Cloudy	10-12 WNW
11/16	0700	1830	MID to low 30's	mostly cloudy	15-20 W/WWN
11/17	0700	1900 1930	Upper 30's to low 40's	Fair/mostly cloudy	7-15 W/WSW

NO RAIN  
WINTER MIX

### Summary of Field Notes/Sheets Recorded:

- Sample Control Log(s) \_\_\_\_\_
- Well Condition Form(s) \_\_\_\_\_
- Water Level and Field Parameters Field Form(s) \_\_\_\_\_
- Well Development And Groundwater Sampling Field Form(s) \_\_\_\_\_
- Chain-of-Custody(s) \_\_\_\_\_
- Equipment Rental Information \_\_\_\_\_
- Other: \_\_\_\_\_

### Contractor Summary:

- N/A

### Summary of Equipment On-Site:

- ROPE
  - 2 - SOLINST WL Meters S/N: 363824 + S/N: 532181 (MODEL 101) (100 ft)
  - RAMBOLL OWNED PERI-Pump (Alexis) # 24345
  - 2 - IN-SITU AQUATRONS 600's w/ TABLETS S/N: 454579 + 454596
  - 1 - RED CONTROLLER/COMPRESSOR (MODEL - MP-50) S/N: MP50-1118
  - 1 - RED WELL WIZARD compressor w/ MP-10 controller
  - 2 - 12V MARINE BATTERIES
  - LDPE TUBING FOR PERI-Pump
  - Silicon tubing
  - Decon Supplies
  - LDPE TUBING (DUAL) for Bladder pump
- Site Visitor Summary:
- TOOLKIT
  - Bladder pump accessories
  - FIRST AID
  - 2 RED SAMPLE PRO 1.75" Bladder pumps
- N/A

# Activity Summary Report

Date(s): 11/14 - 11/17/2022  
Project Number: 1940102653

Page 2 of 3

## Summary of Work (include sample locations, types, media, etc...)

- Monday (11/14/22) - Caroline completed on-site training around 13:00. Met her after completion of training & badge entry. Gauged wells per 845 work plan list for (WL's). Organized coolant equipment in Warehouse "E". Readied sampling equipment for following day.
- Tuesday (11/15/22) - Met onsite around 0700, gathered equipment & began sampling wells. SAMPLED XPW-06, XPW-01, XPW-05, XPW-04 & XPW-02. De-mob'd equipment to Warehouse "E" at end of day. Worked together during sampling activities.
- Wednesday (11/16/22) - Met on-site around 0700 at WH "E". Gathered equipment & cont'd GW sampling. Split up to cover more wells. Sampled TPZ-164, MW-192, MW-392, MW-305, MW-203, MW-193 & MW-2393 & MW-306. Demob'd eqpts at end of day to WH "E". Arit took first batch of samples to lab in Collinsville IL (Telclab). Signed LOC of lab at 21:20.
- Thursday (11/17/22) - Met on-site around 0700 at WH "E". Gathered equipment & cont'd w/ sampling activities. (cont'd to work separately) but frequently checked-in w/ each other to assess progress. Sampled wells: MW-307, MW-194, MW-394, MW-358, MW-258, MW-1582, MW-304, MW-370, & MW-356 & MW-204. Finish remaining wells by end of day. Caroline stayed late to collect & organize equipment. Arit took last batch of samples to lab (Telclab). Turned in badges at end of day. Will mob. to Edwards PP in morning on 11/18/22.

# Activity Summary Report

Date(s): 11/14 - 11/17/22  
Project Number: 1940102563

Page 3 of 3

**Issues/ Resolution:**

- JARS would not pick up samples from site due to scheduling issues. As a result, Ramboll staff had to deliver samples in evenings.

**Additional Comments:**

- N/A

Field Representative: Andrew Hardwick Signature: [Signature]  
Date: 11/17/22





**Chain of  
Custody (Field  
Copies)**

# CHAIN OF CUSTODY

pg. 1 of 2 Work order #

Client: Ramboll  
 Address: 300 S. Wacker Drive  
 City / State / Zip: Chicago, IL 60606  
 Contact: Eric Bauer Phone: (414) 837-3687  
 E-Mail: eric.bauer@ramboll.com Fax: \_\_\_\_\_

Samples on:  ICE  BLUE ICE  NO ICE 0.1 °C LTG# \_\_\_\_\_  
 Preserved in:  LAB  FIELD  
 Lab Notes \_\_\_\_\_ **FOR LAB USE ONLY**

Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No  
 Are these samples known to be hazardous?  Yes  No  
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section.  Yes  No

Client Comments: \_\_\_\_\_  
 \*Sb As Ba Be B Cd Ca Cr Co Pb Li Mg Hg Mo K Se Na Ti (ICP, ICP/MS, CVAA)

Project Name/Number: Baldwin 845  
 Sample Collector's Name: Andrew Hardwick

Results Requested  
 Standard  1-2 Day (100% Surcharge)  
 Other \_\_\_\_\_  3 Day (50% Surcharge)

Billing Instructions \_\_\_\_\_  
 # and Type of Containers \_\_\_\_\_

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers							INDICATE ANALYSIS REQUESTED																					
			UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	ALK B / ALK C	Cl / SO4	Fe Mn	Fluoride	Razze/228	Sr	TDS	Total Metals* (Analyte Values)							
	XPW06	11/15/22 09:29	1	3											X	X	X	X	X	X											
	XPW01	11/15/22 11:23	3	9											X	X	X	X	X	X											
	XPW03	11/15/22 13:43	1	3											X	X	X	X	X	X											
	XPW02	11/15/22 15:33	1	3											X	X	X	X	X	X											
	DUP-01	11/15/22 15:43	1	3											X	X	X	X	X	X											
	XPW04	11/15/22 17:10	1	3											X	X	X	X	X	X											
	EB-01	11/15/22 18:00		1										X																	
	TPZ-164	11/16/22 09:44	1	3											X	X	X	X	X	X											
	MW-192	11/16/22 11:28	1	3											X	X	X	X	X	X											
	MUI-392	11/16/22 13:04	1	3											X	X	X	X	X	X											

Relinquished By: (Signature) (Ramboll) Date/Time: 11/16/22 21:20  
 Received By: (Signature) Date/Time: 11/16/22 21:20

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

## CHAIN OF CUSTODY

pg. 2 of 2 Work order #

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

**Client:** Ramboll  
**Address:** 300 S Wacker Drive  
**City / State / Zip:** Chicago, IL 60606  
**Contact:** Eric Bauer  
**E-Mail:** eric.bauer@ramboll.com  
**Phone:** (414) 837-3687  
**Fax:**

**Samples on:**  ICE  BLUE ICE  NO ICE 6.1 °C LTG#  
**Preserved in:**  LAB  FIELD **FOR LAB USE ONLY**  
**Lab Notes**

Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No  
 Are these samples known to be hazardous?  Yes  No  
 Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section.  Yes  No


**Client Comments:**  
 \*Sb As Ba Be B Cd Ca Cr Co Pb Li Mg Hg Mo K Se Na Tl (CP, ICP/MS, CVAA)

Project Name/Number		Sample Collector's Name		Matrix		INDICATE ANALYSIS REQUESTED																			
Baldwin 845		ANDREW HARTWILLK		Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	ALK B / ALK C	Cl / SO4	Fe Mn	Fluoride	Ra226/228	Sr	TDS	Total Metals*								
Results Requested		Billing Instructions																# and Type of Containers							
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER														
Lab Use Only	Sample Identification	Date/Time Sampled																							
	MW-393	11/16/22	1452	1	3																				
	MW-193	11/16/22	16:03	1	3																				
	MW-305	11/16/22	1415	1	15																				
	MW-2043	11/16/22	1533	1	1																				
	MW-306	11/16/22	1704	1	3																				
	EB-02	11/16/22	1845		1																				

**Relinquished By:** [Signature] **Date/Time:** 11/16/22 09:22

**Received By:** [Signature] **Date/Time:** 11/16/22 3:20

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

Bottle Order: 76521 

**TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005**

**CHAIN OF CUSTODY**

**Client:** Ramboll  
**Address:** 300 S. Wacker Drive  
**City / State / Zip:** Chicago, IL 60606  
**Contact:** Eric Bauer  
**E-Mail:** eric.bauer@ramboll.com

pg.    of    Work order #           

Samples on:  ICE  BLUE ICE  NO ICE 38 °C LTG#     
Preserved in:  LAB  FIELD  
Lab Notes **FOR LAB USE ONLY**

Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No  
Are these samples known to be hazardous?  Yes  No  
Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section.  Yes  No

**Client Comments:**  
\*Sb As Ba Be B Cd Ca Cr Co Pb Li Mg Hg Mo K Se Na Ti (ICP, ICP/MS, CVAA)

**Project Name/Number** Baldwin 845  
**Sample Collector's Name** ANDREW HARDWIK

**Results Requested**  
 Standard  1-2 Day (100% Surcharge)  
 Other  3 Day (50% Surcharge)

**Billing Instructions**  
**# and Type of Containers**

	ALK B / ALK C	INDICATE ANALYSIS REQUESTED													
		Drinking Water	Soil	Sludge	Special Waste	Groundwater	Fluoride	Fe Mn							

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers												
			UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	Aqueous	Drinking Water	Soil		
	MW-394	11/17/22 0900	1												
	MW-194	11/17/22 1038	1												
	MW-307	11/17/22 1054	1												
	DUP-02	11/17/22 1105	1												
	MW-158R	11/17/22 1200	1												
	MW-358	11/17/22 1240	1												
	MW-258	11/17/22 1322	1												
	MW-304	11/17/22 1435	1												
	MW-370	11/17/22 1620	1												
	MW-356	11/17/22 1623	1												
	MW-204	11/17/22 1825	1												
	EB-03	11/17/22 1900	1												

Relinquished By	Date/Time	Received By	Date/Time
[Signature]	11/17/22 21:02	[Signature]	11/17/22 21:02

Individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement. See [www.teklabinc.com](http://www.teklabinc.com) for terms and conditions.

BottleOrder: 76521



# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454579  
Created 11/14/2022

## Sensor Conductivity

Serial Number 955165  
Last Calibrated 11/14/2022

### Calibration Details

TDS Conversion Factor (ppm) 0.65  
Cell Constant 1.016  
Reference Temperature 25.00 °C

### Pre Measurement

Actual Conductivity 5,771.5 µS/cm  
Specific Conductivity 7,586.6 µS/cm

### Post Measurement

Actual Conductivity 6,086.0 µS/cm  
Specific Conductivity 8,000.0 µS/cm

## Sensor RDO

Serial Number 792022  
Last Calibrated 11/14/2022

### Calibration Details

Slope 0.9903066  
Offset 0.00 mg/L

### Calibration point 100%

Concentration 10.81 mg/L  
Pre Measurement 101.27 %Sat  
Post Measurement 100.00 %Sat  
Temperature 12.00 °C  
Barometric Pressure 1,006.6 mbar

## Sensor pH/ORP

Serial Number 944377  
Last Calibrated 11/14/2022

### Calibration Details

### Calibration Point 1

pH of Buffer 7.03 pH  
pH mV -8.4 mV  
Temperature 12.47 °C



Pre Measurement

pH 7.59 pH  
pH mV -8.5 mV

Post Measurement

pH 7.03 pH  
pH mV -8.0 mV

Slope and Offset 1

Slope -56.67 mV/pH  
Offset -6.7 mV

ORP

ORP Solution Quick-Cal  
Offset 18.2 mV  
Temperature 12.47 °C  
Pre Measurement 192.8 mV  
Post Measurement 242.4 mV

**Sensor Turbidity**

Serial Number 770225  
Last Calibrated 11/14/2022

Calibration Details

Slope 1  
Offset -0.37 NTU

Calibration Point 1

Pre Measurement 12.69 NTU  
Post Measurement 10.00 NTU

**Sensor Barometric Pressure**

Serial Number 454579  
Last Calibrated 11/9/2022

Calibration Details

Offset 1.09 mm Hg  
Pre Measurement 14.56 psi  
Post Measurement 14.53 psi

**Sensor Pressure**

Serial Number 454206  
Last Calibrated 11/9/2022

Calibration Details

Zero Offset 0.00 psi  
Reference Depth 0.00 ft  
Reference Offset 0.00 psi  
Pre Measurement -0.01 psi

Post Measurement 0.00 psi

# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454579  
Created 11/17/2022

## Sensor Conductivity

Serial Number 955165  
Last Calibrated 11/17/2022

### Calibration Details

TDS Conversion Factor (ppm) 0.65  
Cell Constant 1.057  
Reference Temperature 25.00 °C

## Sensor RDO

Serial Number 792022  
Last Calibrated 11/17/2022

### Calibration Details

Slope 0.9323344  
Offset 0.00 mg/L

### Calibration point 100%

Concentration 15.71 mg/L  
Pre Measurement 99.98 %Sat  
Post Measurement 100.00 %Sat  
Temperature -0.05 °C  
Barometric Pressure 1,013.6 mbar

## Sensor pH/ORP

Serial Number 944377  
Last Calibrated 11/16/2022

### Calibration Details

#### Calibration Point 1

pH of Buffer 7.10 pH  
pH mV -8.4 mV  
Temperature 2.01 °C

#### Pre Measurement

pH 7.03 pH  
pH mV -8.4 mV

#### Post Measurement

pH 7.10 pH  
pH mV -7.8 mV

Slope and Offset 1

Slope -54.6 mV/pH  
Offset -3.0 mV

ORP

ORP Solution Quick-Cal  
Offset 16.5 mV  
Temperature 2.01 °C  
Pre Measurement 259.8 mV  
Post Measurement 258.2 mV

**Sensor Turbidity**

Serial Number 770225  
Last Calibrated 11/17/2022

Calibration Details

Slope 1  
Offset -2.19 NTU

Calibration Point 1

Pre Measurement 11.60 NTU  
Post Measurement 10.00 NTU

**Sensor Barometric Pressure**

Serial Number 454579  
Last Calibrated 11/9/2022

Calibration Details

Offset 1.09 mm Hg  
Pre Measurement 14.56 psi  
Post Measurement 14.53 psi

**Sensor Pressure**

Serial Number 454206  
Last Calibrated 11/9/2022

Calibration Details

Zero Offset 0.00 psi  
Reference Depth 0.00 ft  
Reference Offset 0.00 psi  
Pre Measurement -0.01 psi  
Post Measurement 0.00 psi

# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454596  
Created 11/14/2022

## Sensor Conductivity

Serial Number 538317  
Last Calibrated 11/14/2022

### *Calibration Details*

---

TDS Conversion Factor (ppm)	0.65
Cell Constant	1.402
Reference Temperature	25.00 °C

### *Pre Measurement*

---

Actual Conductivity	4,884.0 µS/cm
Specific Conductivity	6,262.4 µS/cm

### *Post Measurement*

---

Actual Conductivity	6,239.1 µS/cm
Specific Conductivity	8,000.0 µS/cm

## Sensor Turbidity

Serial Number 766658  
Last Calibrated 11/14/2022

### *Calibration Details*

---

TSS Conversion Factor (mg/L)	0
Slope	1
Offset	-7.55 NTU

### *Calibration Point 1*

---

Pre Measurement	10.06 NTU
Post Measurement	10.00 NTU

## Sensor RDO

Serial Number 833895  
Last Calibrated 11/14/2022

### *Calibration Details*

---

Slope	0.9585853
Offset	0.00 mg/L

### *Calibration point 100%*

---

Concentration	11.30 mg/L
Pre Measurement	101.84 %Sat
Post Measurement	100.00 %Sat

Temperature 11.46 °C  
Barometric Pressure 1,005.8 mbar

Sensor	pH/ORP
Serial Number	687048
Last Calibrated	11/14/2022

Calibration Details

Calibration Point 1

pH of Buffer 7.03 pH  
pH mV -0.5 mV  
Temperature 13.48 °C

Pre Measurement

pH 7.06 pH  
pH mV -0.5 mV

Post Measurement

pH 7.03 pH  
pH mV -0.5 mV

Slope and Offset 1

Slope -56.87 mV/pH  
Offset 1.2 mV

ORP

ORP Solution Quick-Cal  
Offset 65.9 mV  
Temperature 13.48 °C  
Pre Measurement 221.8 mV  
Post Measurement 240.9 mV

Sensor	Barometric Pressure
Serial Number	454596
Last Calibrated	11/9/2022

Calibration Details

Offset 1.40 mm Hg  
Pre Measurement 14.57 psi  
Post Measurement 14.53 psi

Sensor	Pressure
Serial Number	454202
Last Calibrated	11/9/2022

Calibration Details

Zero Offset -0.03 psi  
Reference Depth 0.00 ft  
Reference Offset 0.00 psi

Pre Measurement 0.00 psi

Post Measurement 0.00 psi

# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454596  
Created 11/16/2022

## Sensor Conductivity

Serial Number 538317  
Last Calibrated 11/16/2022

### *Calibration Details*

---

TDS Conversion Factor (ppm)	0.65
Cell Constant	1.141
Reference Temperature	25.00 °C

### *Pre Measurement*

---

Actual Conductivity	5,548.6 µS/cm
Specific Conductivity	9,836.6 µS/cm

### *Post Measurement*

---

Actual Conductivity	4,512.6 µS/cm
Specific Conductivity	8,000.0 µS/cm

## Sensor Turbidity

Serial Number 766658  
Last Calibrated 11/16/2022

### *Calibration Details*

---

TSS Conversion Factor (mg/L)	0
Slope	1
Offset	-4.35 NTU

### *Calibration Point 1*

---

Pre Measurement	7.06 NTU
Post Measurement	10.00 NTU

## Sensor RDO

Serial Number 833895  
Last Calibrated 11/16/2022

### *Calibration Details*

---

Slope	0.9030147
Offset	0.00 mg/L

### *Calibration point 100%*

---

Concentration	15.61 mg/L
Pre Measurement	106.25 %Sat
Post Measurement	100.00 %Sat



Temperature 1.28 °C  
Barometric Pressure 1,012.6 mbar

Sensor	pH/ORP
Serial Number	687048
Last Calibrated	11/16/2022

Calibration Details

Calibration Point 1

pH of Buffer 7.10 pH  
pH mV -2.2 mV  
Temperature 2.18 °C

Pre Measurement

pH 7.06 pH  
pH mV -2.2 mV

Post Measurement

pH 7.10 pH  
pH mV -2.1 mV

Slope and Offset 1

Slope -54.63 mV/pH  
Offset 3.2 mV

ORP

ORP Solution Quick-Cal  
Offset 43.8 mV  
Temperature 2.18 °C  
Pre Measurement 278.9 mV  
Post Measurement 257.9 mV

Sensor	Barometric Pressure
Serial Number	454596
Last Calibrated	11/9/2022

Calibration Details

Offset 1.40 mm Hg  
Pre Measurement 14.57 psi  
Post Measurement 14.53 psi

Sensor	Pressure
Serial Number	454202
Last Calibrated	11/9/2022

Calibration Details

Zero Offset -0.03 psi  
Reference Depth 0.00 ft  
Reference Offset 0.00 psi

Pre Measurement 0.00 psi

Post Measurement 0.00 psi

# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454596  
Created 11/16/2022

## Sensor Conductivity

Serial Number 538317  
Last Calibrated 11/16/2022

### *Calibration Details*

---

TDS Conversion Factor (ppm)	0.65
Cell Constant	1.141
Reference Temperature	25.00 °C

### *Pre Measurement*

---

Actual Conductivity	5,548.6 µS/cm
Specific Conductivity	9,836.6 µS/cm

### *Post Measurement*

---

Actual Conductivity	4,512.6 µS/cm
Specific Conductivity	8,000.0 µS/cm

## Sensor Turbidity

Serial Number 766658  
Last Calibrated 11/16/2022

### *Calibration Details*

---

TSS Conversion Factor (mg/L)	0
Slope	1
Offset	-4.35 NTU

### *Calibration Point 1*

---

Pre Measurement	7.06 NTU
Post Measurement	10.00 NTU

## Sensor RDO

Serial Number 833895  
Last Calibrated 11/16/2022

### *Calibration Details*

---

Slope	0.9030147
Offset	0.00 mg/L

### *Calibration point 100%*

---

Concentration	15.61 mg/L
Pre Measurement	106.25 %Sat
Post Measurement	100.00 %Sat

Temperature 1.28 °C  
Barometric Pressure 1,012.6 mbar

Sensor	pH/ORP
Serial Number	687048
Last Calibrated	11/16/2022

Calibration Details

Calibration Point 1

pH of Buffer 7.10 pH  
pH mV -2.2 mV  
Temperature 2.18 °C

Pre Measurement

pH 7.06 pH  
pH mV -2.2 mV

Post Measurement

pH 7.10 pH  
pH mV -2.1 mV

Slope and Offset 1

Slope -54.63 mV/pH  
Offset 3.2 mV

ORP

ORP Solution Quick-Cal  
Offset 43.8 mV  
Temperature 2.18 °C  
Pre Measurement 278.9 mV  
Post Measurement 257.9 mV

Sensor	Barometric Pressure
Serial Number	454596
Last Calibrated	11/9/2022

Calibration Details

Offset 1.40 mm Hg  
Pre Measurement 14.57 psi  
Post Measurement 14.53 psi

Sensor	Pressure
Serial Number	454202
Last Calibrated	11/9/2022

Calibration Details

Zero Offset -0.03 psi  
Reference Depth 0.00 ft  
Reference Offset 0.00 psi

Pre Measurement 0.00 psi

Post Measurement 0.00 psi

# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454596  
Created 11/17/2022

## Sensor Conductivity

Serial Number 538317  
Last Calibrated 11/17/2022

### *Calibration Details*

---

TDS Conversion Factor (ppm)	0.65
Cell Constant	1.154
Reference Temperature	25.00 °C

### *Pre Measurement*

---

Actual Conductivity	4,980.5 µS/cm
Specific Conductivity	9,242.6 µS/cm

### *Post Measurement*

---

Actual Conductivity	4,310.9 µS/cm
Specific Conductivity	8,000.0 µS/cm

## Sensor Turbidity

Serial Number 766658  
Last Calibrated 11/16/2022

### *Calibration Details*

---

TSS Conversion Factor (mg/L)	0
Slope	1
Offset	-4.35 NTU

### *Calibration Point 1*

---

Pre Measurement	7.06 NTU
Post Measurement	10.00 NTU

## Sensor RDO

Serial Number 833895  
Last Calibrated 11/17/2022

### *Calibration Details*

---

Slope	0.8997188
Offset	0.00 mg/L

### *Calibration point 100%*

---

Concentration	16.09 mg/L
Pre Measurement	100.40 %Sat
Post Measurement	100.00 %Sat

Temperature 0.38 °C  
Barometric Pressure 1,013.7 mbar

Sensor	pH/ORP
Serial Number	687048
Last Calibrated	11/17/2022

Calibration Details

Calibration Point 1

pH of Buffer 7.10 pH  
pH mV -3.1 mV  
Temperature 0.86 °C

Pre Measurement

pH 7.06 pH  
pH mV -2.9 mV

Post Measurement

pH 7.10 pH  
pH mV -2.8 mV

Slope and Offset 1

Slope -54.37 mV/pH  
Offset 2.4 mV

ORP

ORP Solution Quick-Cal  
Offset 15.3 mV  
Temperature 0.86 °C  
Pre Measurement 272.0 mV  
Post Measurement 259.9 mV

Sensor	Barometric Pressure
Serial Number	454596
Last Calibrated	11/9/2022

Calibration Details

Offset 1.40 mm Hg  
Pre Measurement 14.57 psi  
Post Measurement 14.53 psi

Sensor	Pressure
Serial Number	454202
Last Calibrated	11/9/2022

Calibration Details

Zero Offset -0.03 psi  
Reference Depth 0.00 ft  
Reference Offset 0.00 psi

Pre Measurement 0.00 psi

Post Measurement 0.00 psi



# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454596  
Created 11/17/2022

## Sensor Conductivity

Serial Number 538317  
Last Calibrated 11/17/2022

### *Calibration Details*

---

TDS Conversion Factor (ppm)	0.65
Cell Constant	1.154
Reference Temperature	25.00 °C

### *Pre Measurement*

---

Actual Conductivity	4,980.5 µS/cm
Specific Conductivity	9,242.6 µS/cm

### *Post Measurement*

---

Actual Conductivity	4,310.9 µS/cm
Specific Conductivity	8,000.0 µS/cm

## Sensor Turbidity

Serial Number 766658  
Last Calibrated 11/16/2022

### *Calibration Details*

---

TSS Conversion Factor (mg/L)	0
Slope	1
Offset	-4.35 NTU

### *Calibration Point 1*

---

Pre Measurement	7.06 NTU
Post Measurement	10.00 NTU

## Sensor RDO

Serial Number 833895  
Last Calibrated 11/17/2022

### *Calibration Details*

---

Slope	0.8997188
Offset	0.00 mg/L

### *Calibration point 100%*

---

Concentration	16.09 mg/L
Pre Measurement	100.40 %Sat
Post Measurement	100.00 %Sat

Temperature 0.38 °C  
Barometric Pressure 1,013.7 mbar

Sensor	pH/ORP
Serial Number	687048
Last Calibrated	11/17/2022

Calibration Details

Calibration Point 1

pH of Buffer 7.10 pH  
pH mV -3.1 mV  
Temperature 0.86 °C

Pre Measurement

pH 7.06 pH  
pH mV -2.9 mV

Post Measurement

pH 7.10 pH  
pH mV -2.8 mV

Slope and Offset 1

Slope -54.37 mV/pH  
Offset 2.4 mV

ORP

ORP Solution Quick-Cal  
Offset 15.3 mV  
Temperature 0.86 °C  
Pre Measurement 272.0 mV  
Post Measurement 259.9 mV

Sensor	Barometric Pressure
Serial Number	454596
Last Calibrated	11/9/2022

Calibration Details

Offset 1.40 mm Hg  
Pre Measurement 14.57 psi  
Post Measurement 14.53 psi

Sensor	Pressure
Serial Number	454202
Last Calibrated	11/9/2022

Calibration Details

Zero Offset -0.03 psi  
Reference Depth 0.00 ft  
Reference Offset 0.00 psi

Pre Measurement 0.00 psi

Post Measurement 0.00 psi

# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454596  
Created 11/17/2022

## Sensor Conductivity

Serial Number 538317  
Last Calibrated 11/17/2022

### Calibration Details

TDS Conversion Factor (ppm) 0.65  
Cell Constant 1.154  
Reference Temperature 25.00 °C

### Pre Measurement

Actual Conductivity 4,980.5  $\mu\text{S}/\text{cm}$   
Specific Conductivity 9,242.6  $\mu\text{S}/\text{cm}$

### Post Measurement

Actual Conductivity 4,310.9  $\mu\text{S}/\text{cm}$   
Specific Conductivity 8,000.0  $\mu\text{S}/\text{cm}$

## Sensor Turbidity

Serial Number 766658  
Last Calibrated 11/16/2022

### Calibration Details

TSS Conversion Factor (mg/L) 0  
Slope 1  
Offset -4.35 NTU

### Calibration Point 1

Pre Measurement 7.06 NTU  
Post Measurement 10.00 NTU

## Sensor RDO

Serial Number 833895  
Last Calibrated 11/17/2022

### Calibration Details

Slope 0.8997188  
Offset 0.00 mg/L

### Calibration point 100%

Concentration 16.09 mg/L  
Pre Measurement 100.40 %Sat  
Post Measurement 100.00 %Sat

Temperature 0.38 °C  
Barometric Pressure 1,013.7 mbar

Sensor	pH/ORP
Serial Number	687048
Last Calibrated	11/17/2022

Calibration Details

Calibration Point 1

pH of Buffer 7.10 pH  
pH mV -3.1 mV  
Temperature 0.86 °C

Pre Measurement

pH 7.06 pH  
pH mV -2.9 mV

Post Measurement

pH 7.10 pH  
pH mV -2.8 mV

Slope and Offset 1

Slope -54.37 mV/pH  
Offset 2.4 mV

ORP

ORP Solution Quick-Cal  
Offset 15.3 mV  
Temperature 0.86 °C  
Pre Measurement 272.0 mV  
Post Measurement 259.9 mV

Sensor	Barometric Pressure
Serial Number	454596
Last Calibrated	11/9/2022

Calibration Details

Offset 1.40 mm Hg  
Pre Measurement 14.57 psi  
Post Measurement 14.53 psi

Sensor	Pressure
Serial Number	454202
Last Calibrated	11/9/2022

Calibration Details

Zero Offset -0.03 psi  
Reference Depth 0.00 ft  
Reference Offset 0.00 psi

Pre Measurement 0.00 psi

Post Measurement 0.00 psi



## Report Contents

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

**Client:** Ramboll

**Work Order:** 22120968

**Client Project:** Baldwin Part 845

**Report Date:** 13-Jan-23

**This reporting package includes the following:**

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Sample Summary	15
Dates Report	16
Receiving Check List	17
Chain of Custody	Appended

**Client:** Ramboll

**Work Order:** 22120968

**Client Project:** Baldwin Part 845

**Report Date:** 13-Jan-23

### Abbr Definition

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

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

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

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

DNI Did not ignite

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

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

IDPH IL Dept. of Public Health

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

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

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

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

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

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

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

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

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

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

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

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

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

TNTC Too numerous to count (> 200 CFU)



**Client:** Ramboll

**Work Order:** 22120968

**Client Project:** Baldwin Part 845

**Report Date:** 13-Jan-23

### Qualifiers

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

**Client:** Ramboll

**Work Order:** 22120968

**Client Project:** Baldwin Part 845

**Report Date:** 13-Jan-23

**Cooler Receipt Temp:** 4.0 °C

Radium 226/228 analyses were performed by Pace Analytical National. See attached for results and QC report.

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**Locations**

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**Collinsville**

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

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**Collinsville Air**

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

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**Springfield**

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

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**Chicago**

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

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**Kansas City**

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



## Accreditations

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

**Client:** Ramboll

**Work Order:** 22120968

**Client Project:** Baldwin Part 845

**Report Date:** 13-Jan-23

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



# Laboratory Results

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

**Client:** Ramboll  
**Client Project:** Baldwin Part 845  
**Lab ID:** 22120968-001  
**Matrix:** GROUNDWATER

**Work Order:** 22120968  
**Report Date:** 13-Jan-23  
**Client Sample ID:** XPW01  
**Collection Date:** 12/13/2022 8:38

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	01/04/2023 0:00	R323494



## Laboratory Results

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

**Client:** Ramboll

**Work Order:** 22120968

**Client Project:** Baldwin Part 845

**Report Date:** 13-Jan-23

**Lab ID:** 22120968-002

**Client Sample ID:** DUP-02

**Matrix:** GROUNDWATER

**Collection Date:** 12/13/2022 8:38

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	01/04/2023 0:00	R323494



## Laboratory Results

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

**Client:** Ramboll  
**Client Project:** Baldwin Part 845  
**Lab ID:** 22120968-003  
**Matrix:** GROUNDWATER

**Work Order:** 22120968  
**Report Date:** 13-Jan-23  
**Client Sample ID:** XPW06  
**Collection Date:** 12/13/2022 10:48

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	01/04/2023 0:00	R323494



## Laboratory Results

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

**Client:** Ramboll  
**Client Project:** Baldwin Part 845  
**Lab ID:** 22120968-004  
**Matrix:** GROUNDWATER

**Work Order:** 22120968  
**Report Date:** 13-Jan-23  
**Client Sample ID:** MW-356  
**Collection Date:** 12/13/2022 12:12

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	01/04/2023 0:00	R323494



# Laboratory Results

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

**Client:** Ramboll  
**Client Project:** Baldwin Part 845  
**Lab ID:** 22120968-005  
**Matrix:** GROUNDWATER

**Work Order:** 22120968  
**Report Date:** 13-Jan-23  
**Client Sample ID:** XPW04  
**Collection Date:** 12/12/2022 10:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	01/04/2023 0:00	R323494





## Laboratory Results

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

**Client:** Ramboll

**Work Order:** 22120968

**Client Project:** Baldwin Part 845

**Report Date:** 13-Jan-23

**Lab ID:** 22120968-006

**Client Sample ID:** DUP-01

**Matrix:** GROUNDWATER

**Collection Date:** 12/12/2022 10:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	01/04/2023 0:00	R323494



# Laboratory Results

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

**Client:** Ramboll  
**Client Project:** Baldwin Part 845  
**Lab ID:** 22120968-007  
**Matrix:** GROUNDWATER

**Work Order:** 22120968  
**Report Date:** 13-Jan-23  
**Client Sample ID:** XPW05  
**Collection Date:** 12/12/2022 12:17

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	01/04/2023 0:00	R323494



## Laboratory Results

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

**Client:** Ramboll  
**Client Project:** Baldwin Part 845  
**Lab ID:** 22120968-008  
**Matrix:** GROUNDWATER

**Work Order:** 22120968  
**Report Date:** 13-Jan-23  
**Client Sample ID:** XPW02  
**Collection Date:** 12/12/2022 14:28

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SEE ATTACHED FOR SUBCONTRACTING ANALYSIS</b>								
Subcontracted Analysis	*	0		See Attached		1	01/04/2023 0:00	R323494



## Sample Summary

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

**Client:** Ramboll

**Work Order:** 22120968

**Client Project:** Baldwin Part 845

**Report Date:** 13-Jan-23

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
22120968-001	XPW01	Groundwater	1	12/13/2022 8:38
22120968-002	DUP-02	Groundwater	1	12/13/2022 8:38
22120968-003	XPW06	Groundwater	1	12/13/2022 10:48
22120968-004	MW-356	Groundwater	1	12/13/2022 12:12
22120968-005	XPW04	Groundwater	1	12/12/2022 10:25
22120968-006	DUP-01	Groundwater	1	12/12/2022 10:25
22120968-007	XPW05	Groundwater	1	12/12/2022 12:17
22120968-008	XPW02	Groundwater	1	12/12/2022 14:28



## Dates Report

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

Client: Ramboll

Work Order: 22120968

Client Project: Baldwin Part 845

Report Date: 13-Jan-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
22120968-001A	XPW01	12/13/2022 8:38	12/14/2022 16:30		
	See Attached for Subcontracting Analysis				01/04/2023 0:00
22120968-002A	DUP-02	12/13/2022 8:38	12/14/2022 16:30		
	See Attached for Subcontracting Analysis				01/04/2023 0:00
22120968-003A	XPW06	12/13/2022 10:48	12/14/2022 16:30		
	See Attached for Subcontracting Analysis				01/04/2023 0:00
22120968-004A	MW-356	12/13/2022 12:12	12/14/2022 16:30		
	See Attached for Subcontracting Analysis				01/04/2023 0:00
22120968-005A	XPW04	12/12/2022 10:25	12/14/2022 16:30		
	See Attached for Subcontracting Analysis				01/04/2023 0:00
22120968-006A	DUP-01	12/12/2022 10:25	12/14/2022 16:30		
	See Attached for Subcontracting Analysis				01/04/2023 0:00
22120968-007A	XPW05	12/12/2022 12:17	12/14/2022 16:30		
	See Attached for Subcontracting Analysis				01/04/2023 0:00
22120968-008A	XPW02	12/12/2022 14:28	12/14/2022 16:30		
	See Attached for Subcontracting Analysis				01/04/2023 0:00



# Receiving Check List

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

Client: Ramboll

Work Order: 22120968

Client Project: Baldwin Part 845

Report Date: 13-Jan-23

Carrier: Skyler Mathis

Received By: MLD

Completed by:

Reviewed by:

On:

On:

15-Dec-22

16-Dec-22

Lindsey Maddox

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

- |   |   |   |  |                                  |
|---|---|---|--|----------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             | Not Present <input type="checkbox"/>   | Temp °C <b>4.0</b>               |
| Type of thermal preservation?                           | None <input type="checkbox"/>           | Ice <input checked="" type="checkbox"/> | Blue Ice <input type="checkbox"/>      | Dry Ice <input type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Reported field parameters measured:                     | Field <input type="checkbox"/>          | Lab <input type="checkbox"/>            | NA <input checked="" type="checkbox"/> |                                  |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |

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

- |   |                              |  |   |
|---|------------------------------|--|---|
| Water – at least one vial per sample has zero headspace?  | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | No VOA vials <input checked="" type="checkbox"/>      |
| Water - TOX containers have zero headspace?               | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | No TOX containers <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt?                       | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | NA <input type="checkbox"/>                           |
| NPDES/CWA TCN interferences checked/treated in the field? | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | NA <input checked="" type="checkbox"/>                |

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

pH strip #83856. - lmaddox - 12/15/2022 10:10:06 AM

Additional Nitric Acid (86511) was needed in MW-356 and XPWO2 upon arrival at the laboratory. - lmaddox - 12/15/2022 10:10:18 AM

# CHAIN OF CUSTODY

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

**Client:** Ramboll  
**Address:** 234 W. Florida Street  
**City / State / Zip:** Milwaukee, WI 53204  
**Contact:** Eric Bauer **Phone:** (920) 255-4997  
**E-Mail:** eric.bauer@ramboll.com **Fax:**

**Samples on:**  ICE  BLUE ICE  NO ICE 4 °C LTG# 5  
**Preserved in:**  LAB  FIELD **FOR LAB USE ONLY**  
**Lab Notes:** PH: 8.3856 (60571) MW-356, XP-W02 UM 12/14

Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No  
 Are these samples known to be hazardous?  Yes  No  
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section.  Yes  No

**Client Comments:**  
 Metals: Sb As Ba Be B Cd Ca Cr Co Pb Li Mg Hg Mo K Se Na Ti (ICP, ICP/MS, CVAA)  
 BAL-22Q4-845-601-R3

**Project Name/Number:** Baldwin Part 845  
**Sample Collector's Name:** SAMUEL MALLOW

**Results Requested:**  Standard  1-2 Day (100% Surcharge)  
 Other  3 Day (50% Surcharge)  
**Billing Instructions:**  
**# and Type of Containers:**

MATRIX				INDICATE ANALYSIS REQUESTED													
Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	ALK B / ALK C	Cl SO4	F- TDS	Ra226/228 (SUB)	Total Metals							

Lab Use Only	Sample Identification	Date/Time Sampled	UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER
22120968-001	XPW01	12-13-22 0838	2							
-002	DUP-02	12-13-22 0838	1							
-003	XPW06	12-13-22 1048	1							
-004	MW-356	12-13-22 1212	1							
-005	XPW04	12-12-22 1025	1							
-006	DUP-01	12-12-22 1025	1							
-007	XPW05	12-12-22 1217	6							
-008	XPW02	12-12-22 1428	2							

					X					X								
																		Courier
																		PERFORM MS MSD

Relinquished By	Date/Time
SAMUEL MALLOW	12/13/22 1540
<i>[Signature]</i>	12/14/22 4:30

Received By	Date/Time
<i>[Signature]</i>	12/13/22 1540
Marvin A. Darling II	12/14/22 1630



**TEKLAB, Inc.**

Sample Delivery Group: L1569410  
Samples Received: 12/19/2022  
Project Number: 22120968  
Description:  
Site: 001  
Report To: Elizabeth Hurley  
5445 Horseshoe Lake Road  
Collinsville, IL 62234

Entire Report Reviewed By:



Mark W. Beasley  
Project Manager

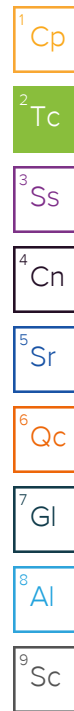
Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory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

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)



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# SAMPLE SUMMARY

## 22120968-001 L1569410-01 Non-Potable Water

Collected by S Mallow      Collected date/time 12/13/22 08:38      Received date/time 12/19/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1977365	1	12/21/22 11:03	01/10/23 10:32	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1977869	1	12/27/22 08:55	01/10/23 10:32	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1977869	1	12/27/22 08:55	01/04/23 11:47	RGT	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

## 22120968-002 L1569410-02 Non-Potable Water

Collected by S Mallow      Collected date/time 12/13/22 08:38      Received date/time 12/19/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1977365	1	12/21/22 11:03	01/10/23 10:32	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1977869	1	12/27/22 08:55	01/10/23 10:32	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1977869	1	12/27/22 08:55	01/04/23 11:47	RGT	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

## 22120968-003 L1569410-03 Non-Potable Water

Collected by S Mallow      Collected date/time 12/13/22 10:48      Received date/time 12/19/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1977365	1	12/21/22 11:03	01/10/23 10:32	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1977869	1	12/27/22 08:55	01/10/23 10:32	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1977869	1	12/27/22 08:55	01/04/23 11:47	RGT	Mt. Juliet, TN

7 Gl

8 Al

9 Sc

## 22120968-004 L1569410-04 Non-Potable Water

Collected by S Mallow      Collected date/time 12/13/22 12:12      Received date/time 12/19/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1977365	1	12/21/22 11:03	01/10/23 10:32	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1977869	1	12/27/22 08:55	01/10/23 10:32	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1977869	1	12/27/22 08:55	01/04/23 11:47	RGT	Mt. Juliet, TN

## 22120968-005 L1569410-05 Non-Potable Water

Collected by S Mallow      Collected date/time 12/12/22 10:25      Received date/time 12/19/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1977365	1	12/21/22 11:03	01/10/23 10:32	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1977869	1	12/27/22 08:55	01/10/23 10:32	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1977869	1	12/27/22 08:55	01/04/23 11:47	RGT	Mt. Juliet, TN

## 22120968-006 L1569410-06 Non-Potable Water

Collected by S Mallow      Collected date/time 12/12/22 10:25      Received date/time 12/19/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1977365	1	12/21/22 11:03	01/10/23 10:32	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1977869	1	12/27/22 08:55	01/10/23 10:32	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1977869	1	12/27/22 08:55	01/04/23 11:47	RGT	Mt. Juliet, TN

# SAMPLE SUMMARY

## 22120968-007 L1569410-07 Non-Potable Water

Collected by: S Mallow  
 Collected date/time: 12/12/22 12:17  
 Received date/time: 12/19/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1977365	1	12/21/22 11:03	01/10/23 10:32	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1977869	1	12/27/22 08:55	01/10/23 10:32	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1977869	1	12/27/22 08:55	01/04/23 12:32	RGT	Mt. Juliet, TN

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

## 22120968-008 L1569410-08 Non-Potable Water

Collected by: S Mallow  
 Collected date/time: 12/12/22 14:28  
 Received date/time: 12/19/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1977365	1	12/21/22 11:03	01/10/23 10:32	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1977869	1	12/27/22 08:55	01/10/23 10:32	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1977869	1	12/27/22 08:55	01/04/23 12:32	RGT	Mt. Juliet, TN

# CASE NARRATIVE

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



Mark W. Beasley  
Project Manager

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.38		0.219	0.356	01/10/2023 10:32	<a href="#">WG1977365</a>
(T) Barium	92.7			30.0-143	01/10/2023 10:32	<a href="#">WG1977365</a>
(T) Yttrium	114			30.0-136	01/10/2023 10:32	<a href="#">WG1977365</a>

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.86		0.376	0.482	01/10/2023 10:32	<a href="#">WG1977869</a>

<sup>4</sup>Cn

<sup>5</sup>Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.475		0.306	0.325	01/04/2023 11:47	<a href="#">WG1977869</a>
(T) Barium-133	89.3			30.0-143	01/04/2023 11:47	<a href="#">WG1977869</a>

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.70		0.290	0.477	01/10/2023 10:32	<a href="#">WG1977365</a>
(T) Barium	108			30.0-143	01/10/2023 10:32	<a href="#">WG1977365</a>
(T) Yttrium	105			30.0-136	01/10/2023 10:32	<a href="#">WG1977365</a>

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

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	2.51		0.478	0.571	01/10/2023 10:32	<a href="#">WG1977869</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.815		0.380	0.314	01/04/2023 11:47	<a href="#">WG1977869</a>
(T) Barium-133	84.6			30.0-143	01/04/2023 11:47	<a href="#">WG1977869</a>

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.623		0.210	0.367	01/10/2023 10:32	<a href="#">WG1977365</a>
(T) Barium	101			30.0-143	01/10/2023 10:32	<a href="#">WG1977365</a>
(T) Yttrium	114			30.0-136	01/10/2023 10:32	<a href="#">WG1977365</a>

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

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.854		0.333	0.505	01/10/2023 10:32	<a href="#">WG1977869</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.231	J	0.258	0.347	01/04/2023 11:47	<a href="#">WG1977869</a>
(T) Barium-133	83.9			30.0-143	01/04/2023 11:47	<a href="#">WG1977869</a>

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.544		0.213	0.375	01/10/2023 10:32	<a href="#">WG1977365</a>
(T) Barium	90.5			30.0-143	01/10/2023 10:32	<a href="#">WG1977365</a>
(T) Yttrium	117			30.0-136	01/10/2023 10:32	<a href="#">WG1977365</a>

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.746		0.313	0.487	01/10/2023 10:32	<a href="#">WG1977869</a>

<sup>4</sup>Cn

<sup>5</sup>Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.203	J	0.229	0.310	01/04/2023 11:47	<a href="#">WG1977869</a>
(T) Barium-133	90.9			30.0-143	01/04/2023 11:47	<a href="#">WG1977869</a>

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.08		0.231	0.388	01/10/2023 10:32	<a href="#">WG1977365</a>
(T) Barium	94.5			30.0-143	01/10/2023 10:32	<a href="#">WG1977365</a>
(T) Yttrium	117			30.0-136	01/10/2023 10:32	<a href="#">WG1977365</a>

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

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.13		0.284	0.489	01/10/2023 10:32	<a href="#">WG1977869</a>

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0552	<u>U</u>	0.166	0.298	01/04/2023 11:47	<a href="#">WG1977869</a>
(T) Barium-133	84.3			30.0-143	01/04/2023 11:47	<a href="#">WG1977869</a>

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.597		0.222	0.390	01/10/2023 10:32	<a href="#">WG1977365</a>
(T) Barium	89.8			30.0-143	01/10/2023 10:32	<a href="#">WG1977365</a>
(T) Yttrium	104			30.0-136	01/10/2023 10:32	<a href="#">WG1977365</a>

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.800		0.319	0.499	01/10/2023 10:32	<a href="#">WG1977869</a>

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.203	J	0.229	0.311	01/04/2023 11:47	<a href="#">WG1977869</a>
(T) Barium-133	84.6			30.0-143	01/04/2023 11:47	<a href="#">WG1977869</a>

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.840		0.222	0.380	01/10/2023 10:32	<a href="#">WG1977365</a>
(T) Barium	94.6			30.0-143	01/10/2023 10:32	<a href="#">WG1977365</a>
(T) Yttrium	120			30.0-136	01/10/2023 10:32	<a href="#">WG1977365</a>

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.956		0.280	0.458	01/10/2023 10:32	<a href="#">WG1977869</a>

<sup>4</sup>Cn

<sup>5</sup>Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.116	J	0.170	0.256	01/04/2023 12:32	<a href="#">WG1977869</a>
(T) Barium-133	86.6			30.0-143	01/04/2023 12:32	<a href="#">WG1977869</a>

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.882		0.182	0.303	01/10/2023 10:32	<a href="#">WG1977365</a>
(T) Barium	107			30.0-143	01/10/2023 10:32	<a href="#">WG1977365</a>
(T) Yttrium	102			30.0-136	01/10/2023 10:32	<a href="#">WG1977365</a>

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.41		0.325	0.364	01/10/2023 10:32	<a href="#">WG1977869</a>

<sup>4</sup>Cn

<sup>5</sup>Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.527		0.269	0.202	01/04/2023 12:32	<a href="#">WG1977869</a>
(T) Barium-133	86.5			30.0-143	01/04/2023 12:32	<a href="#">WG1977869</a>

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3880148-1 01/10/23 10:32

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-228	0.321		0.152	0.270
(T) Barium	103		103	
(T) Yttrium	114		114	

L1569410-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1569410-02 01/10/23 10:32 • (DUP) R3880148-5 01/10/23 10:32

Analyte	Original Result pCi/l	Original Uncertainty + / -	Original MDA pCi/l	DUP Result pCi/l	DUP Uncertainty + / -	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	1.70	0.290	0.477	1.49	0.303	0.477	1	12.9	0.491		20	3
(T) Barium	108			94.9	94.9							
(T) Yttrium	105			123	123							

Laboratory Control Sample (LCS)

(LCS) R3880148-2 01/10/23 10:32

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.00	100	80.0-120	
(T) Barium			94.9		
(T) Yttrium			115		

L1569410-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1569410-07 01/10/23 10:32 • (MS) R3880148-3 01/10/23 10:32 • (MSD) R3880148-4 01/10/23 10:32

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	10.0	0.840	10.2	9.24	93.9	84.0	1	70.0-130			10.2		20
(T) Barium		94.6			90.9	102							
(T) Yttrium		120			117	110							

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3879724-1 01/04/23 11:07

Analyte	MB Result	MB Qualifier	MB Uncertainty	MB MDA
	pCi/l		+ / -	pCi/l
Radium-226	0.0138	<u>U</u>	0.0630	0.106
(T) Barium-133	81.4		81.4	

L1569414-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1569414-11 01/04/23 18:20 • (DUP) R3879724-5 01/04/23 11:10

Analyte	Original Result	Original Uncertainty	Original MDA	DUP Result	DUP Uncertainty	DUP MDA	Dilution	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	+ / -	pCi/l		%			%	
Radium-226	0.125	0.258	0.395	0.126	0.259	0.395	1	0.399	0.00137	<u>U</u>	20	3
(T) Barium-133	89.3			88.9	88.9							

Laboratory Control Sample (LCS)

(LCS) R3879724-2 01/04/23 11:07

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-226	5.02	5.99	119	80.0-120	
(T) Barium-133			78.1		

L1569410-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1569410-07 01/04/23 12:32 • (MS) R3879724-3 01/04/23 11:08 • (MSD) R3879724-4 01/04/23 11:09

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-226	20.0	0.116	22.9	24.6	114	122	1	75.0-125			6.99		20
(T) Barium-133		86.6			82.7	76.6							

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

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

### Abbreviations and Definitions

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

### Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

# ACCREDITATIONS & LOCATIONS

## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



**TEKLAB, Inc. Chain of Custody**

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

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

Teklab Inc  
5445 Horseshoe Lake Road  
Collinsville, IL 62234

Cooler Temp:  Sampler:  QC Level:

Project#

Comments:   
Please analyze for Radium 226/228 on your standard turn around time.  
Samples collected from an IL site.  
Batch QC is required for all analyses requested. EDD requested..

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

Phone:

*45269410*

**PLEASE NOTE:**

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

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix	Ra226/228	MS/MSD													
-01	22120968-001	12/13/22 0838	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-02	22120968-002	12/13/22 0838	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-03	22120968-003	12/13/22 1048	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-04	22120968-004	12/13/22 1212	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-05	22120968-005	12/12/22 1025	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-06	22120968-006	12/12/22 1025	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-07	22120968-007	12/12/22 1217	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-08	22120968-008	12/12/22 1428	HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			HNO3	Groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

Received By	Date/Time
<i>E. Hurley (Field)</i>	<i>12/16/22 1000</i>



January 04, 2023

Eric Bauer  
Ramboll  
300 S. Wacker Drive  
Suite 130  
Chicago, IL 60606  
TEL: (414) 837-3687  
FAX: (414) 837-3608



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

**RE:** Baldwin Part 845

**WorkOrder:** 22120969

Dear Eric Bauer:

TEKLAB, INC received 8 samples on 12/14/2022 4:30:00 PM for the analysis presented in the following report.

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

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

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

Sincerely,



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



## Report Contents

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

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**Client:** Ramboll

**Work Order:** 22120969

**Client Project:** Baldwin Part 845

**Report Date:** 04-Jan-23

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**This reporting package includes the following:**

Cover Letter	1
Report Contents	2
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Accreditations	6
Laboratory Results	7
Sample Summary	15
Dates Report	16
Quality Control Results	19
Receiving Check List	27
Chain of Custody	Appended

**Client:** Ramboll

**Work Order:** 22120969

**Client Project:** Baldwin Part 845

**Report Date:** 04-Jan-23

### Abbr Definition

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

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

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

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

DNI Did not ignite

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

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

IDPH IL Dept. of Public Health

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

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

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

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

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

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

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

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

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

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

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

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

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

TNTC Too numerous to count (> 200 CFU)

**Client:** Ramboll

**Work Order:** 22120969

**Client Project:** Baldwin Part 845

**Report Date:** 04-Jan-23

### Qualifiers

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



## Case Narrative

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

**Client:** Ramboll

**Work Order:** 22120969

**Client Project:** Baldwin Part 845

**Report Date:** 04-Jan-23

**Cooler Receipt Temp:** 4.0 °C

---

### Locations

---

#### Collinsville

**Address** 5445 Horseshoe Lake Road  
Collinsville, IL 62234-7425

**Phone** (618) 344-1004

**Fax** (618) 344-1005

**Email** jhriley@teklabinc.com

---

#### Collinsville Air

**Address** 5445 Horseshoe Lake Road  
Collinsville, IL 62234-7425

**Phone** (618) 344-1004

**Fax** (618) 344-1005

**Email** EHurley@teklabinc.com

---

#### Springfield

**Address** 3920 Pintail Dr  
Springfield, IL 62711-9415

**Phone** (217) 698-1004

**Fax** (217) 698-1005

**Email** KKlostermann@teklabinc.com

---

#### Chicago

**Address** 1319 Butterfield Rd.  
Downers Grove, IL 60515

**Phone** (630) 324-6855

**Fax**

**Email** arenner@teklabinc.com

---

#### Kansas City

**Address** 8421 Nieman Road  
Lenexa, KS 66214

**Phone** (913) 541-1998

**Fax** (913) 541-1998

**Email** jhriley@teklabinc.com



## Accreditations

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

**Client:** Ramboll

**Work Order:** 22120969

**Client Project:** Baldwin Part 845

**Report Date:** 04-Jan-23

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





## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120969-001  
 Matrix: GROUNDWATER

Work Order: 22120969  
 Report Date: 04-Jan-23

Client Sample ID: XPW01

Collection Date: 12/13/2022 8:38

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		204	mg/L	1	12/16/2022 14:04	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	12/16/2022 14:04	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		385	mg/L	2.5	12/15/2022 11:35	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		120	mg/L	5	12/19/2022 17:43	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.50	mg/L	1	12/15/2022 10:50	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		25	mg/L	1	12/19/2022 17:37	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		81.5	mg/L	1	12/20/2022 16:08	201100
Lithium	NELAP	0.0050		0.0354	mg/L	1	12/20/2022 16:08	201100
Magnesium	NELAP	0.0500		22.4	mg/L	1	12/20/2022 16:08	201100
Potassium	NELAP	0.500		12.5	mg/L	5	12/21/2022 12:13	201100
Sodium	NELAP	0.0500		34.1	mg/L	1	12/20/2022 16:08	201100
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0012	mg/L	5	12/19/2022 20:19	201100
Arsenic	NELAP	0.0010		0.0093	mg/L	5	12/19/2022 20:19	201100
Barium	NELAP	0.0010		0.272	mg/L	5	12/19/2022 20:19	201100
Beryllium	NELAP	0.0010		0.0013	mg/L	5	12/19/2022 20:19	201100
Boron	NELAP	0.0250		0.942	mg/L	5	12/19/2022 20:19	201100
Cadmium	NELAP	0.0010	J	0.0005	mg/L	5	12/19/2022 20:19	201100
Chromium	NELAP	0.0015		0.0761	mg/L	5	12/20/2022 12:31	201100
Cobalt	NELAP	0.0010		0.0143	mg/L	5	12/19/2022 20:19	201100
Lead	NELAP	0.0010		0.0171	mg/L	5	12/19/2022 20:19	201100
Molybdenum	NELAP	0.0015		0.0660	mg/L	5	12/20/2022 12:31	201100
Selenium	NELAP	0.0010		0.0192	mg/L	5	12/19/2022 20:19	201100
Thallium	NELAP	0.0020	J	0.0011	mg/L	5	12/19/2022 20:19	201100
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/19/2022 16:34	201162



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120969-002  
 Matrix: GROUNDWATER

Work Order: 22120969  
 Report Date: 04-Jan-23  
 Client Sample ID: DUP-02  
 Collection Date: 12/13/2022 8:38

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		215	mg/L	1	12/16/2022 14:09	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	12/16/2022 14:09	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		394	mg/L	1	12/15/2022 11:35	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		118	mg/L	5	12/19/2022 17:51	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.51	mg/L	1	12/15/2022 10:52	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		25	mg/L	1	12/19/2022 17:45	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		77.1	mg/L	1	12/20/2022 16:12	201100
Lithium	NELAP	0.0050		0.0197	mg/L	1	12/20/2022 16:12	201100
Magnesium	NELAP	0.0500		20.2	mg/L	1	12/20/2022 16:12	201100
Potassium	NELAP	0.100		9.87	mg/L	1	12/20/2022 16:12	201100
Sodium	NELAP	0.0500		34.2	mg/L	1	12/20/2022 16:12	201100
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 20:26	201100
Arsenic	NELAP	0.0010	J	0.0010	mg/L	5	12/19/2022 20:26	201100
Barium	NELAP	0.0010		0.131	mg/L	5	12/19/2022 20:26	201100
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 20:26	201100
Boron	NELAP	0.0250		1.07	mg/L	5	12/19/2022 20:26	201100
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 20:26	201100
Chromium	NELAP	0.0015	J	0.0007	mg/L	5	12/20/2022 12:38	201100
Cobalt	NELAP	0.0010	J	0.0002	mg/L	5	12/19/2022 20:26	201100
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 20:26	201100
Molybdenum	NELAP	0.0015		0.0517	mg/L	5	12/20/2022 12:38	201100
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 20:26	201100
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/19/2022 20:26	201100
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/19/2022 16:37	201162



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120969-003  
 Matrix: GROUNDWATER

Work Order: 22120969  
 Report Date: 04-Jan-23

Client Sample ID: XPW06

Collection Date: 12/13/2022 10:48

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		371	mg/L	1	12/16/2022 14:15	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	12/16/2022 14:15	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		975	mg/L	2.5	12/15/2022 11:37	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	200		508	mg/L	20	12/19/2022 17:59	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.59	mg/L	1	12/15/2022 10:54	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		18	mg/L	1	12/19/2022 17:54	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		174	mg/L	1	12/20/2022 16:16	201100
Lithium	NELAP	0.0050		0.0075	mg/L	1	12/20/2022 18:17	201100
Magnesium	NELAP	0.0500		43.5	mg/L	1	12/20/2022 16:16	201100
Potassium	NELAP	0.500		21.4	mg/L	5	12/21/2022 12:38	201100
Sodium	NELAP	0.0500		114	mg/L	1	12/20/2022 16:16	201100
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 20:32	201100
Arsenic	NELAP	0.0010		0.0023	mg/L	5	12/19/2022 20:32	201100
Barium	NELAP	0.0010		0.246	mg/L	5	12/19/2022 20:32	201100
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 20:32	201100
Boron	NELAP	0.0250		3.86	mg/L	5	12/19/2022 20:32	201100
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 20:32	201100
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 12:44	201100
Cobalt	NELAP	0.0010	J	0.0005	mg/L	5	12/19/2022 20:32	201100
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 20:32	201100
Molybdenum	NELAP	0.0015		0.114	mg/L	5	12/20/2022 12:44	201100
Selenium	NELAP	0.0010		0.0021	mg/L	5	12/19/2022 20:32	201100
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/19/2022 20:32	201100
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/19/2022 16:39	201162



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120969-004  
 Matrix: GROUNDWATER

Work Order: 22120969  
 Report Date: 04-Jan-23  
 Client Sample ID: MW-356  
 Collection Date: 12/13/2022 12:12

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		516	mg/L	1	12/16/2022 14:21	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	12/16/2022 14:21	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		652	mg/L	1	12/15/2022 11:38	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		47	mg/L	1	12/19/2022 18:02	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		2.02	mg/L	1	12/15/2022 10:55	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		33	mg/L	1	12/19/2022 18:01	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		12.3	mg/L	1	12/20/2022 16:19	201100
Lithium	NELAP	0.0050		0.0575	mg/L	1	12/20/2022 16:19	201100
Magnesium	NELAP	0.0500		7.50	mg/L	1	12/20/2022 16:19	201100
Potassium	NELAP	0.100		2.63	mg/L	1	12/20/2022 16:19	201100
Sodium	NELAP	0.0500		263	mg/L	1	12/20/2022 16:19	201100
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	J	0.0006	mg/L	5	12/19/2022 21:03	201100
Arsenic	NELAP	0.0010	J	0.0005	mg/L	5	12/19/2022 21:03	201100
Barium	NELAP	0.0010		0.0393	mg/L	5	12/19/2022 21:03	201100
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:03	201100
Boron	NELAP	0.0250		2.71	mg/L	5	12/19/2022 21:03	201100
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:03	201100
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 12:50	201100
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:03	201100
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:03	201100
Molybdenum	NELAP	0.0015	J	0.0008	mg/L	5	12/20/2022 12:50	201100
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:03	201100
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/19/2022 21:03	201100
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/19/2022 16:41	201162



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120969-005  
 Matrix: GROUNDWATER

Work Order: 22120969  
 Report Date: 04-Jan-23

Client Sample ID: XPW04

Collection Date: 12/12/2022 10:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		193	mg/L	1	12/16/2022 14:28	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		24	mg/L	1	12/16/2022 14:28	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		428	mg/L	1	12/15/2022 11:38	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		120	mg/L	5	12/19/2022 18:31	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.42	mg/L	1	12/15/2022 10:57	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		55	mg/L	5	12/19/2022 18:31	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		51.1	mg/L	1	12/20/2022 16:23	201100
Lithium	NELAP	0.0050		0.0136	mg/L	1	12/20/2022 16:23	201100
Magnesium	NELAP	0.0500		27.1	mg/L	1	12/20/2022 16:23	201100
Potassium	NELAP	0.500		12.3	mg/L	5	12/21/2022 12:41	201100
Sodium	NELAP	0.0500		67.0	mg/L	1	12/20/2022 16:23	201100
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:10	201100
Arsenic	NELAP	0.0010	J	0.0007	mg/L	5	12/19/2022 21:10	201100
Barium	NELAP	0.0010		0.196	mg/L	5	12/19/2022 21:10	201100
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:10	201100
Boron	NELAP	0.0250		1.38	mg/L	5	12/19/2022 21:10	201100
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:10	201100
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 12:56	201100
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:10	201100
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:10	201100
Molybdenum	NELAP	0.0015		0.0169	mg/L	5	12/20/2022 12:56	201100
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:10	201100
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/19/2022 21:10	201100
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/19/2022 16:43	201162



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120969-006  
 Matrix: GROUNDWATER

Work Order: 22120969  
 Report Date: 04-Jan-23  
 Client Sample ID: DUP-01  
 Collection Date: 12/12/2022 10:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		166	mg/L	1	12/16/2022 14:35	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		25	mg/L	1	12/16/2022 14:35	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		404	mg/L	1	12/15/2022 11:41	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		122	mg/L	5	12/20/2022 10:52	R322638
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.42	mg/L	1	12/15/2022 10:59	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	8		51	mg/L	2	12/19/2022 18:39	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		50.2	mg/L	1	12/20/2022 16:27	201100
Lithium	NELAP	0.0050		0.0119	mg/L	1	12/20/2022 16:27	201100
Magnesium	NELAP	0.0500		26.7	mg/L	1	12/20/2022 16:27	201100
Potassium	NELAP	0.500		12.2	mg/L	5	12/21/2022 12:45	201100
Sodium	NELAP	0.0500		66.6	mg/L	1	12/20/2022 16:27	201100
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:16	201100
Arsenic	NELAP	0.0010	J	0.0007	mg/L	5	12/19/2022 21:16	201100
Barium	NELAP	0.0010		0.207	mg/L	5	12/19/2022 21:16	201100
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:16	201100
Boron	NELAP	0.0250		1.46	mg/L	5	12/19/2022 21:16	201100
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:16	201100
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 13:47	201100
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:16	201100
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:16	201100
Molybdenum	NELAP	0.0015		0.0157	mg/L	5	12/20/2022 13:47	201100
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:16	201100
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/19/2022 21:16	201100
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/19/2022 16:50	201162



# Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120969-007  
 Matrix: GROUNDWATER

Work Order: 22120969  
 Report Date: 04-Jan-23

Client Sample ID: XPW05

Collection Date: 12/12/2022 12:17

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		212	mg/L	1	12/16/2022 14:41	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	12/16/2022 14:41	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		432	mg/L	1	12/15/2022 11:47	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		137	mg/L	5	12/19/2022 18:55	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.62	mg/L	1	12/15/2022 11:00	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		48	mg/L	1	12/19/2022 18:44	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100	S	43.6	mg/L	1	12/20/2022 16:30	201100
Lithium	NELAP	0.0050		0.0093	mg/L	1	12/20/2022 16:30	201100
Magnesium	NELAP	0.0500	S	17.5	mg/L	1	12/20/2022 16:30	201100
Potassium	NELAP	0.500		10.1	mg/L	5	12/21/2022 12:49	201100
Sodium	NELAP	0.0500	S	80.5	mg/L	1	12/20/2022 16:30	201100
<i>Matrix spike control limits for Ca, Mg, and Na are not applicable due to high sample/spike ratio.</i>								
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	S	< 0.0010	mg/L	5	12/19/2022 21:47	201100
Arsenic	NELAP	0.0010		0.0031	mg/L	5	12/19/2022 21:47	201100
Barium	NELAP	0.0010		0.190	mg/L	5	12/20/2022 13:03	201100
Beryllium	NELAP	0.0010	S	< 0.0010	mg/L	5	12/19/2022 21:47	201100
Boron	NELAP	0.0250	S	1.25	mg/L	5	01/04/2023 11:56	201332
Cadmium	NELAP	0.0010	S	< 0.0010	mg/L	5	12/19/2022 21:47	201100
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 13:03	201100
Cobalt	NELAP	0.0010	J	0.0001	mg/L	5	12/19/2022 21:47	201100
Lead	NELAP	0.0010	S	< 0.0010	mg/L	5	12/19/2022 21:47	201100
Molybdenum	NELAP	0.0015		0.0228	mg/L	5	12/20/2022 13:03	201100
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:47	201100
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/19/2022 21:47	201100
<i>Matrix spike did not recover within control limits for B due to sample composition.</i>								
<i>Matrix spike recovered outside upper control limits for Sb, Be, Cd, and Pb. Sample results are below the reporting limit. Data is reportable.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/19/2022 16:52	201162



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120969-008  
 Matrix: GROUNDWATER

Work Order: 22120969  
 Report Date: 04-Jan-23  
 Client Sample ID: XPW02  
 Collection Date: 12/12/2022 14:28

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		374	mg/L	1	12/16/2022 15:04	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	12/16/2022 15:04	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	50		390	mg/L	2.5	12/15/2022 11:49	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		37	mg/L	1	12/19/2022 19:19	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.63	mg/L	1	12/15/2022 11:06	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		32	mg/L	1	12/19/2022 19:19	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		110	mg/L	1	12/20/2022 18:21	201100
Lithium	NELAP	0.0050		0.0230	mg/L	1	12/20/2022 18:21	201100
Magnesium	NELAP	0.0500		23.8	mg/L	1	12/20/2022 18:21	201100
Potassium	NELAP	0.100		9.96	mg/L	1	12/20/2022 18:21	201100
Sodium	NELAP	0.0500		44.5	mg/L	1	12/20/2022 18:21	201100
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:22	201100
Arsenic	NELAP	0.0010		0.0036	mg/L	5	12/19/2022 21:22	201100
Barium	NELAP	0.0010		0.257	mg/L	5	12/19/2022 21:22	201100
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:22	201100
Boron	NELAP	0.0250		1.52	mg/L	5	12/19/2022 21:22	201100
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:22	201100
Chromium	NELAP	0.0015	J	0.0008	mg/L	5	12/20/2022 13:53	201100
Cobalt	NELAP	0.0010	J	0.0003	mg/L	5	12/19/2022 21:22	201100
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:22	201100
Molybdenum	NELAP	0.0015		0.0334	mg/L	5	12/20/2022 13:53	201100
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:22	201100
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/19/2022 21:22	201100
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/19/2022 16:59	201162





## Sample Summary

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

**Client:** Ramboll

**Work Order:** 22120969

**Client Project:** Baldwin Part 845

**Report Date:** 04-Jan-23

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
22120969-001	XPW01	Groundwater	2	12/13/2022 8:38
22120969-002	DUP-02	Groundwater	2	12/13/2022 8:38
22120969-003	XPW06	Groundwater	2	12/13/2022 10:48
22120969-004	MW-356	Groundwater	2	12/13/2022 12:12
22120969-005	XPW04	Groundwater	2	12/12/2022 10:25
22120969-006	DUP-01	Groundwater	2	12/12/2022 10:25
22120969-007	XPW05	Groundwater	2	12/12/2022 12:17
22120969-008	XPW02	Groundwater	2	12/12/2022 14:28



## Dates Report

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

Client: Ramboll

Work Order: 22120969

Client Project: Baldwin Part 845

Report Date: 04-Jan-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
22120969-001A	XPW01	12/13/2022 8:38	12/14/2022 16:30		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 14:04
	Standard Methods 2320 B 1997, 2011				12/16/2022 14:04
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 11:35
	SW-846 9036 (Total)				12/19/2022 17:43
	SW-846 9214 (Total)				12/15/2022 10:50
	SW-846 9251 (Total)				12/19/2022 17:37
22120969-001B	XPW01	12/13/2022 8:38	12/14/2022 16:30		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/20/2022 16:08
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/21/2022 12:13
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/19/2022 20:19
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/20/2022 12:31
	SW-846 7470A (Total)			12/19/2022 9:34	12/19/2022 16:34
22120969-002A	DUP-02	12/13/2022 8:38	12/14/2022 16:30		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 14:09
	Standard Methods 2320 B 1997, 2011				12/16/2022 14:09
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 11:35
	SW-846 9036 (Total)				12/19/2022 17:51
	SW-846 9214 (Total)				12/15/2022 10:52
	SW-846 9251 (Total)				12/19/2022 17:45
22120969-002B	DUP-02	12/13/2022 8:38	12/14/2022 16:30		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/20/2022 16:12
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/19/2022 20:26
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/20/2022 12:38
	SW-846 7470A (Total)			12/19/2022 9:34	12/19/2022 16:37
22120969-003A	XPW06	12/13/2022 10:48	12/14/2022 16:30		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 14:15
	Standard Methods 2320 B 1997, 2011				12/16/2022 14:15
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 11:37
	SW-846 9036 (Total)				12/19/2022 17:59
	SW-846 9214 (Total)				12/15/2022 10:54
	SW-846 9251 (Total)				12/19/2022 17:54
22120969-003B	XPW06	12/13/2022 10:48	12/14/2022 16:30		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/20/2022 16:16
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/20/2022 18:17
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/21/2022 12:38
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/19/2022 20:32



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22120969

**Client Project:** Baldwin Part 845

**Report Date:** 04-Jan-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/20/2022 12:44
	SW-846 7470A (Total)			12/19/2022 9:34	12/19/2022 16:39
22120969-004A	MW-356	12/13/2022 12:12	12/14/2022 16:30		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 14:21
	Standard Methods 2320 B 1997, 2011				12/16/2022 14:21
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 11:38
	SW-846 9036 (Total)				12/19/2022 18:02
	SW-846 9214 (Total)				12/15/2022 10:55
	SW-846 9251 (Total)				12/19/2022 18:01
22120969-004B	MW-356	12/13/2022 12:12	12/14/2022 16:30		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/20/2022 16:19
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/19/2022 21:03
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/20/2022 12:50
	SW-846 7470A (Total)			12/19/2022 9:34	12/19/2022 16:41
22120969-005A	XPW04	12/12/2022 10:25	12/14/2022 16:30		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 14:28
	Standard Methods 2320 B 1997, 2011				12/16/2022 14:28
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 11:38
	SW-846 9036 (Total)				12/19/2022 18:31
	SW-846 9214 (Total)				12/15/2022 10:57
	SW-846 9251 (Total)				12/19/2022 18:31
22120969-005B	XPW04	12/12/2022 10:25	12/14/2022 16:30		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/20/2022 16:23
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/21/2022 12:41
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/19/2022 21:10
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/20/2022 12:56
	SW-846 7470A (Total)			12/19/2022 9:34	12/19/2022 16:43
22120969-006A	DUP-01	12/12/2022 10:25	12/14/2022 16:30		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 14:35
	Standard Methods 2320 B 1997, 2011				12/16/2022 14:35
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 11:41
	SW-846 9036 (Total)				12/20/2022 10:52
	SW-846 9214 (Total)				12/15/2022 10:59
	SW-846 9251 (Total)				12/19/2022 18:39
22120969-006B	DUP-01	12/12/2022 10:25	12/14/2022 16:30		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/20/2022 16:27
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/21/2022 12:45



## Dates Report

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

Client: Ramboll

Work Order: 22120969

Client Project: Baldwin Part 845

Report Date: 04-Jan-23

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/19/2022 21:16
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/20/2022 13:47
	SW-846 7470A (Total)			12/19/2022 9:34	12/19/2022 16:50
22120969-007A	XPW05	12/12/2022 12:17	12/14/2022 16:30		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 14:41
	Standard Methods 2320 B 1997, 2011				12/16/2022 14:41
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 11:47
	SW-846 9036 (Total)				12/19/2022 18:55
	SW-846 9214 (Total)				12/15/2022 11:00
	SW-846 9251 (Total)				12/19/2022 18:44
22120969-007B	XPW05	12/12/2022 12:17	12/14/2022 16:30		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/20/2022 16:30
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/21/2022 12:49
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/19/2022 21:47
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/20/2022 13:03
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/22/2022 14:18
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/23/2022 18:10
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/27/2022 7:30	12/27/2022 18:44
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/27/2022 7:30	01/03/2023 15:56
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/27/2022 7:30	01/04/2023 11:56
	SW-846 7470A (Total)			12/19/2022 9:34	12/19/2022 16:52
22120969-008A	XPW02	12/12/2022 14:28	12/14/2022 16:30		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 15:04
	Standard Methods 2320 B 1997, 2011				12/16/2022 15:04
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 11:49
	SW-846 9036 (Total)				12/19/2022 19:19
	SW-846 9214 (Total)				12/15/2022 11:06
	SW-846 9251 (Total)				12/19/2022 19:19
22120969-008B	XPW02	12/12/2022 14:28	12/14/2022 16:30		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/20/2022 18:21
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/19/2022 21:22
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/20/2022 13:53
	SW-846 7470A (Total)			12/19/2022 9:34	12/19/2022 16:59



## Quality Control Results

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

**Client:** Ramboll

**Work Order:** 22120969

**Client Project:** Baldwin Part 845

**Report Date:** 04-Jan-23

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

Batch R322496		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	12/16/2022	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	12/16/2022	

Batch R322496		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		928	1000	0	92.8	90	110	12/15/2022	
Total Dissolved Solids		20		966	1000	0	96.6	90	110	12/16/2022	

Batch R322496		SampType: DUP		Units mg/L							
SampID: 22120969-002ADUP											
										RPD Limit: 5	
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Total Dissolved Solids		20		388				394.0	1.53	12/15/2022	

### SW-846 9036 (TOTAL)

Batch R322574		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	12/19/2022	

Batch R322574		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	94.8	90	110	12/19/2022	

Batch R322574		SampType: MS		Units mg/L							
SampID: 22120969-007AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		50		233	100.0	136.6	96.0	85	115	12/19/2022	

Batch R322574		SampType: MSD		Units mg/L							
SampID: 22120969-007AMSD											
										RPD Limit: 10	
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		50	E	251	100.0	136.6	114.3	232.6	7.60	12/19/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22120969

Client Project: Baldwin Part 845

Report Date: 04-Jan-23

### SW-846 9036 (TOTAL)

Batch R322638		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	12/20/2022	

Batch R322638		SampType: LCS		Units mg/L							
SampID: ICB/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		20	20.00	0	101.8	90	110	12/20/2022	

### SW-846 9214 (TOTAL)

Batch R322419		SampType: MBLK		Units mg/L							
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		< 0.10	0.0370	0	0	-100	100	12/15/2022	

Batch R322419		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		1.03	1.000	0	102.5	90	110	12/15/2022	

Batch R322419		SampType: MS		Units mg/L							
SampID: 22120969-007AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.73	2.000	0.6190	105.6	75	125	12/15/2022	

Batch R322419		SampType: MSD		Units mg/L							
SampID: 22120969-007AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.81	2.000	0.6190	109.6	2.730	2.89	12/15/2022	

### SW-846 9251 (TOTAL)

Batch R322586		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	12/19/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22120969

Client Project: Baldwin Part 845

Report Date: 04-Jan-23

### SW-846 9251 (TOTAL)

Batch R322586		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		<b>20</b>	20.00	0	100.6	90	110	12/19/2022	

Batch R322586		SampType: MS		Units mg/L							
SampID: 22120969-007AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4	E	<b>69</b>	20.00	48.43	103.8	85	115	12/19/2022	

Batch R322586		SampType: MSD		Units mg/L							
SampID: 22120969-007AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4	E	<b>69</b>	20.00	48.43	104.0	69.18	0.07	12/19/2022	

Batch R322645		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	12/20/2022	

Batch R322645		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		<b>20</b>	20.00	0	101.4	90	110	12/20/2022	

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

Batch 201100		SampType: MBLK		Units mg/L							
SampID: MBLK-201100											
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	12/19/2022	
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	12/20/2022	
Lithium	*	0.0050		< 0.0050	0.0019	0	0	-100	100	12/20/2022	
Lithium	*	0.0050		< 0.0050	0.0019	0	0	-100	100	12/19/2022	
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	12/20/2022	
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	12/19/2022	
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	12/20/2022	
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	12/19/2022	
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	12/20/2022	
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	12/19/2022	

Client: Ramboll

Work Order: 22120969

Client Project: Baldwin Part 845

Report Date: 04-Jan-23

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

Batch 201100 SampType: LCS Units mg/L

SampID: LCS-201100

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		<b>2.52</b>	2.500	0	100.7	85	115	12/20/2022
Calcium		0.100		<b>2.46</b>	2.500	0	98.3	85	115	12/19/2022
Lithium	*	0.0050		<b>0.526</b>	0.5000	0	105.2	85	115	12/19/2022
Lithium	*	0.0050		<b>0.560</b>	0.5000	0	112.1	85	115	12/20/2022
Magnesium		0.0500		<b>2.54</b>	2.500	0	101.5	85	115	12/20/2022
Magnesium		0.0500		<b>2.45</b>	2.500	0	97.9	85	115	12/19/2022
Potassium		0.100		<b>2.48</b>	2.500	0	99.2	85	115	12/20/2022
Potassium		0.100		<b>2.46</b>	2.500	0	98.4	85	115	12/19/2022
Sodium		0.0500		<b>2.24</b>	2.500	0	89.4	85	115	12/19/2022
Sodium		0.0500		<b>2.32</b>	2.500	0	92.9	85	115	12/20/2022

Batch 201100 SampType: MS Units mg/L

SampID: 22120969-007BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	<b>47.6</b>	2.500	43.55	162.0	75	125	12/20/2022
Lithium		0.0050		<b>0.552</b>	0.5000	0.009300	108.4	75	125	12/20/2022
Magnesium		0.0500	S	<b>20.8</b>	2.500	17.48	131.6	75	125	12/20/2022
Potassium		0.500		<b>12.3</b>	2.500	10.06	90.8	75	125	12/21/2022
Sodium		0.0500		<b>83.1</b>	2.500	80.54	101.2	75	125	12/20/2022

Batch 201100 SampType: MSD Units mg/L

RPD Limit: 20

SampID: 22120969-007BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100		<b>46.0</b>	2.500	43.55	97.6	47.60	3.44	12/20/2022
Lithium		0.0050		<b>0.547</b>	0.5000	0.009300	107.5	0.5515	0.82	12/20/2022
Magnesium		0.0500		<b>19.9</b>	2.500	17.48	97.6	20.77	4.18	12/20/2022
Potassium		0.500		<b>12.4</b>	2.500	10.06	94.6	12.33	0.77	12/21/2022
Sodium		0.0500	S	<b>81.8</b>	2.500	80.54	49.2	83.07	1.58	12/20/2022





## Quality Control Results

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

Client: Ramboll

Work Order: 22120969

Client Project: Baldwin Part 845

Report Date: 04-Jan-23

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

Batch 201100    SampType: MBLK    Units mg/L

SampID: MBLK-201100

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	12/19/2022
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	12/19/2022
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	12/19/2022
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	12/19/2022
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	12/19/2022
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	12/19/2022
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	12/20/2022
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	12/19/2022
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	12/19/2022
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	12/20/2022
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	12/19/2022
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	12/19/2022

Batch 201100    SampType: LCS    Units mg/L

SampID: LCS-201100

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.510	0.5000	0	102.1	80	120	12/19/2022
Arsenic		0.0010		0.512	0.5000	0	102.5	80	120	12/19/2022
Barium		0.0010		1.99	2.000	0	99.3	80	120	12/19/2022
Beryllium		0.0010		0.0483	0.0500	0	96.6	80	120	12/19/2022
Boron		0.0250		0.486	0.5000	0	97.2	80	120	12/19/2022
Cadmium		0.0010		0.0481	0.0500	0	96.2	80	120	12/19/2022
Chromium		0.0015		0.212	0.2000	0	106.0	85	115	12/20/2022
Cobalt		0.0010		0.518	0.5000	0	103.5	80	120	12/19/2022
Lead		0.0010		0.517	0.5000	0	103.5	80	120	12/19/2022
Molybdenum		0.0015		0.495	0.5000	0	99.1	85	115	12/20/2022
Selenium		0.0010		0.473	0.5000	0	94.6	80	120	12/19/2022
Thallium		0.0020		0.231	0.2500	0	92.5	80	120	12/19/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22120969

Client Project: Baldwin Part 845

Report Date: 04-Jan-23

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

Batch 201100 SampType: MS Units mg/L

SampID: 22120969-007BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010	S	<b>0.655</b>	0.5000	0	131.1	75	125	12/19/2022
Arsenic		0.0010		<b>0.581</b>	0.5000	0.003097	115.6	75	125	12/19/2022
Barium		0.0010		<b>2.12</b>	2.000	0.1899	96.7	75	125	12/20/2022
Beryllium		0.0010		<b>0.0619</b>	0.0500	0	123.8	75	125	12/19/2022
Cadmium		0.0010		<b>0.0608</b>	0.0500	0	121.6	75	125	12/19/2022
Chromium		0.0015		<b>0.186</b>	0.2000	0	93.1	75	125	12/20/2022
Cobalt		0.0010		<b>0.594</b>	0.5000	0.0001364	118.8	75	125	12/19/2022
Lead		0.0010	S	<b>0.688</b>	0.5000	0	137.6	75	125	12/19/2022
Molybdenum		0.0015		<b>0.485</b>	0.5000	0.02277	92.4	75	125	12/20/2022
Selenium		0.0010		<b>0.535</b>	0.5000	0	107.1	75	125	12/19/2022
Thallium		0.0020		<b>0.289</b>	0.2500	0	115.7	75	125	12/19/2022

Batch 201100 SampType: MSD Units mg/L

RPD Limit: 20

SampID: 22120969-007BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010	S	<b>0.695</b>	0.5000	0	139.0	0.6554	5.87	12/19/2022
Arsenic		0.0010		<b>0.610</b>	0.5000	0.003097	121.4	0.5810	4.89	12/19/2022
Barium		0.0010		<b>2.09</b>	2.000	0.1899	94.8	2.125	1.89	12/20/2022
Beryllium		0.0010	S	<b>0.0635</b>	0.0500	0	127.1	0.06191	2.61	12/19/2022
Cadmium		0.0010	S	<b>0.0631</b>	0.0500	0	126.3	0.06082	3.72	12/19/2022
Chromium		0.0015		<b>0.184</b>	0.2000	0	91.9	0.1861	1.26	12/20/2022
Cobalt		0.0010		<b>0.622</b>	0.5000	0.0001364	124.3	0.5941	4.55	12/19/2022
Lead		0.0010	S	<b>0.757</b>	0.5000	0	151.4	0.6881	9.54	12/19/2022
Molybdenum		0.0015		<b>0.462</b>	0.5000	0.02277	87.8	0.4848	4.86	12/20/2022
Selenium		0.0010		<b>0.557</b>	0.5000	0	111.5	0.5353	4.06	12/19/2022
Thallium		0.0020		<b>0.300</b>	0.2500	0	119.9	0.2892	3.56	12/19/2022

Batch 201332 SampType: MBLK Units mg/L

SampID: MBLK-201332

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0010		< <b>0.0010</b>	0.0007	0	0	-100	100	12/27/2022
Boron		0.0250		< <b>0.0250</b>	0.0093	0	0	-100	100	12/27/2022
Cadmium		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	12/27/2022
Lead		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	12/27/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22120969

Client Project: Baldwin Part 845

Report Date: 04-Jan-23

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

Batch 201332		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-201332											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Boron		0.0250		<b>0.558</b>	0.5000	0	111.6	85	115	01/04/2023	
Selenium		0.0010		<b>0.549</b>	0.5000	0	109.7	85	115	01/04/2023	

Batch 201332		SampType: LCSD		Units mg/L							RPD Limit: 20	Date Analyzed
SampID: LCSD-201332												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Boron		0.0250		<b>0.490</b>	0.5000	0	98.0	0.5580	12.97	01/04/2023		
Selenium		0.0010		<b>0.523</b>	0.5000	0	104.6	0.5487	4.83	01/04/2023		

Batch 201332		SampType: MS		Units mg/L							Date Analyzed
SampID: 22120969-007BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Boron		0.0250	S	<b>1.88</b>	0.5000	1.248	126.4	75	125	01/04/2023	

Batch 201332		SampType: MSD		Units mg/L							RPD Limit: 20	Date Analyzed
SampID: 22120969-007BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Boron		0.0250	S	<b>1.89</b>	0.5000	1.248	128.6	1.881	0.58	01/04/2023		

### SW-846 7470A (TOTAL)

Batch 201162		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-201162											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>&lt; 0.00020</b>	0.0001	0	0	-100	100	12/19/2022	

Batch 201162		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS-201162											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00495</b>	0.0050	0	99.0	85	115	12/19/2022	

Batch 201162		SampType: MS		Units mg/L							Date Analyzed
SampID: 22120969-007BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00485</b>	0.0050	0	97.0	75	125	12/19/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22120969

Client Project: Baldwin Part 845

Report Date: 04-Jan-23

### SW-846 7470A (TOTAL)

Batch 201162		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 22120969-007BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		<b>0.00477</b>	0.0050	0	95.4	0.004852	1.73	12/19/2022	



# Receiving Check List

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

Client: Ramboll

Work Order: 22120969

Client Project: Baldwin Part 845

Report Date: 04-Jan-23

Carrier: Skylar Mathis

Received By: MLD

Completed by:

Reviewed by:

On:

On:

15-Dec-22

15-Dec-22

Lindsey Maddox

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

- |   |   |   |  |                                  |
|---|---|---|--|----------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             | Not Present <input type="checkbox"/>   | Temp °C <b>4.0</b>               |
| Type of thermal preservation?                           | None <input type="checkbox"/>           | Ice <input checked="" type="checkbox"/> | Blue Ice <input type="checkbox"/>      | Dry Ice <input type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Reported field parameters measured:                     | Field <input type="checkbox"/>          | Lab <input type="checkbox"/>            | NA <input checked="" type="checkbox"/> |                                  |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |

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

- |   |   |                             |   |
|---|---|-----------------------------|---|
| Water – at least one vial per sample has zero headspace?  | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | No VOA vials <input checked="" type="checkbox"/>      |
| Water - TOX containers have zero headspace?               | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | No TOX containers <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt?                       | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/>                           |
| NPDES/CWA TCN interferences checked/treated in the field? | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/>                |

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

pH strip #83856. - lmaddox - 12/15/2022 9:30:52 AM

# CHAIN OF CUSTODY

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

**Client:** Ramboll  
**Address:** 234 W. Florida Street  
**City / State / Zip:** Milwaukee, WI 53204  
**Contact:** Eric Bauer **Phone:** (920) 255-4997  
**E-Mail:** eric.bauer@ramboll.com **Fax:** \_\_\_\_\_

**Samples on:**  ICE  BLUE ICE  NO ICE 4 °C **LTG#** 5  
**Preserved in:**  LAB  FIELD **FOR LAB USE ONLY**  
**Lab Notes:** 83856 LM 12/14

Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No  
 Are these samples known to be hazardous?  Yes  No  
 Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section.  Yes  No

**Client Comments:**  
 Metals: Sb As Ba Be B Cd Ca Cr Co Pb Li Mg Hg Mo K Se Na Ti (ICP, ICP/MS, CVAA)  
 BAL-22Q4-845-601-R3

**Project Name/Number:** Baldwin Part 845  
**Sample Collector's Name:** SAMUEL MALLOW

**Results Requested:**  Standard  1-2 Day (100% Surcharge)  
 Other  3 Day (50% Surcharge)  
**Billing Instructions:** \_\_\_\_\_  
**# and Type of Containers:**

Lab Use Only	Sample Identification	Date/Time Sampled	UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	INDICATE ANALYSIS REQUESTED																						
											Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	ALK B / ALK C	Cl SO4	F- TDS	Total Metals	Sm 12-13-22												
22120969-001	XPW01	12-13-22 0838	2	2																													
-002	DUP-02	12-13-22 0838	1	1																													
-003	XPW06	12-13-22 1048																															
-004	MW-356	12-13-22 1212																															
-005	XPW04	12-12-22 1025																															
-006	DUP-01	12-12-22 1025																															
-007	XPW05	12-12-22 1217	3	3																													
-008	XPW02	12-12-22 1428	1	1																													
			SM		12-13-22																												

Courier

PERFORM MISMSD

Relinquished By	Date/Time	Received By	Date/Time
SAMUEL MALLOW	12/13/22 1540	<i>[Signature]</i>	12/13/22 1540
<i>[Signature]</i>	12/14/22 4:30	Marvin L. Dentling II	12/14/22 1630

December 28, 2022

Eric Bauer  
Ramboll  
300 S. Wacker Drive  
Suite 130  
Chicago, IL 60606  
TEL: (414) 837-3687  
FAX: (414) 837-3608



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

**RE:** Baldwin Part 845

**WorkOrder:** 22120972

Dear Eric Bauer:

TEKLAB, INC received 6 samples on 12/14/2022 8:12:00 PM for the analysis presented in the following report.

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

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

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

Sincerely,



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



## Report Contents

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

**Client:** Ramboll

**Work Order:** 22120972

**Client Project:** Baldwin Part 845

**Report Date:** 28-Dec-22

**This reporting package includes the following:**

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Laboratory Results	7
Sample Summary	13
Dates Report	14
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Receiving Check List	25
Chain of Custody	Appended



**Client:** Ramboll

**Work Order:** 22120972

**Client Project:** Baldwin Part 845

**Report Date:** 28-Dec-22

### 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)

**Client:** Ramboll

**Work Order:** 22120972

**Client Project:** Baldwin Part 845

**Report Date:** 28-Dec-22

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### Qualifiers

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



## Case Narrative

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

**Client:** Ramboll

**Work Order:** 22120972

**Client Project:** Baldwin Part 845

**Report Date:** 28-Dec-22

**Cooler Receipt Temp:** 9.0 °C

### Locations

#### Collinsville

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

#### Collinsville Air

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

#### Springfield

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Springfield, IL 62711-9415  
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**Fax** (217) 698-1005  
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#### Chicago

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

#### Kansas City

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



## Accreditations

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

**Client:** Ramboll

**Work Order:** 22120972

**Client Project:** Baldwin Part 845

**Report Date:** 28-Dec-22

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



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120972-001  
 Matrix: GROUNDWATER

Work Order: 22120972  
 Report Date: 28-Dec-22  
 Client Sample ID: MW-307  
 Collection Date: 12/14/2022 9:48

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		387	mg/L	1	12/16/2022 15:21	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		93	mg/L	1	12/16/2022 15:21	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		958	mg/L	1	12/15/2022 11:49	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		88	mg/L	5	12/19/2022 19:40	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.89	mg/L	1	12/15/2022 11:12	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	80		226	mg/L	20	12/20/2022 21:18	R322645
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		28.5	mg/L	1	12/20/2022 18:39	201100
Lithium	NELAP	0.0050		0.0609	mg/L	1	12/20/2022 18:39	201100
Magnesium	NELAP	0.0500		18.2	mg/L	1	12/20/2022 18:39	201100
Potassium	NELAP	0.100		3.04	mg/L	1	12/20/2022 18:39	201100
Sodium	NELAP	0.0500		367	mg/L	1	12/20/2022 18:39	201100
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0011	mg/L	5	12/19/2022 21:28	201100
Arsenic	NELAP	0.0010		0.0037	mg/L	5	12/19/2022 21:28	201100
Barium	NELAP	0.0010		0.0498	mg/L	5	12/19/2022 21:28	201100
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:28	201100
Boron	NELAP	0.0250		1.63	mg/L	5	12/19/2022 21:28	201100
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:28	201100
Chromium	NELAP	0.0015		0.0019	mg/L	5	12/22/2022 13:53	201100
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:28	201100
Lead	NELAP	0.0010	J	0.0006	mg/L	5	12/19/2022 21:28	201100
Molybdenum	NELAP	0.0015		0.0061	mg/L	5	12/20/2022 13:59	201100
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:28	201100
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/19/2022 21:28	201100
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/19/2022 17:02	201162



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120972-002  
 Matrix: GROUNDWATER

Work Order: 22120972  
 Report Date: 28-Dec-22  
 Client Sample ID: MW-204  
 Collection Date: 12/13/2022 9:26

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		597	mg/L	1	12/16/2022 15:29	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	12/16/2022 15:29	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		712	mg/L	1	12/15/2022 11:50	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		26	mg/L	1	12/19/2022 19:51	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		1.47	mg/L	1	12/15/2022 11:14	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		57	mg/L	5	12/19/2022 19:56	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		17.4	mg/L	1	12/20/2022 18:43	201100
Lithium	NELAP	0.0050		0.0656	mg/L	1	12/20/2022 18:43	201100
Magnesium	NELAP	0.0500		6.78	mg/L	1	12/20/2022 18:43	201100
Potassium	NELAP	0.100		2.23	mg/L	1	12/20/2022 18:43	201100
Sodium	NELAP	0.0500		288	mg/L	1	12/20/2022 18:43	201100
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:35	201100
Arsenic	NELAP	0.0010	J	0.0010	mg/L	5	12/19/2022 21:35	201100
Barium	NELAP	0.0010		0.0933	mg/L	5	12/19/2022 21:35	201100
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:35	201100
Boron	NELAP	0.0250		1.03	mg/L	5	12/19/2022 21:35	201100
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:35	201100
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 14:06	201100
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:35	201100
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:35	201100
Molybdenum	NELAP	0.0015		0.0051	mg/L	5	12/20/2022 14:06	201100
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:35	201100
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/19/2022 21:35	201100
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/19/2022 17:04	201162



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120972-003  
 Matrix: GROUNDWATER

Work Order: 22120972  
 Report Date: 28-Dec-22  
 Client Sample ID: MW-158R  
 Collection Date: 12/13/2022 14:11

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		264	mg/L	1	12/16/2022 15:37	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	12/16/2022 15:37	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	100	H	500	mg/L	5	12/27/2022 11:11	R322885
<i>Sample analysis did not meet hold time requirements.</i>								
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		47	mg/L	1	12/19/2022 20:15	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.40	mg/L	1	12/15/2022 11:16	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		86	mg/L	5	12/19/2022 20:20	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		77.6	mg/L	1	12/20/2022 18:47	201100
Lithium	NELAP	0.0050		0.0105	mg/L	1	12/20/2022 18:47	201100
Magnesium	NELAP	0.0500		28.8	mg/L	1	12/20/2022 18:47	201100
Potassium	NELAP	0.100		0.718	mg/L	1	12/20/2022 18:47	201100
Sodium	NELAP	0.0500		54.0	mg/L	1	12/20/2022 18:47	201100
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:41	201100
Arsenic	NELAP	0.0010		0.0012	mg/L	5	12/19/2022 21:41	201100
Barium	NELAP	0.0010		0.118	mg/L	5	12/19/2022 21:41	201100
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:41	201100
Boron	NELAP	0.0250		0.0254	mg/L	5	12/20/2022 14:12	201100
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:41	201100
Chromium	NELAP	0.0015		0.0056	mg/L	5	12/20/2022 14:12	201100
Cobalt	NELAP	0.0010		0.0013	mg/L	5	12/20/2022 14:12	201100
Lead	NELAP	0.0010	J	0.0006	mg/L	5	12/19/2022 21:41	201100
Molybdenum	NELAP	0.0015		0.0045	mg/L	5	12/22/2022 13:59	201100
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 21:41	201100
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/19/2022 21:41	201100
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/19/2022 17:06	201162



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120972-004  
 Matrix: GROUNDWATER

Work Order: 22120972  
 Report Date: 28-Dec-22  
 Client Sample ID: MW-258  
 Collection Date: 12/13/2022 16:37

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		584	mg/L	1	12/16/2022 15:44	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		42	mg/L	1	12/16/2022 15:44	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		738	mg/L	1	12/15/2022 11:50	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10	J	8	mg/L	1	12/19/2022 20:23	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		2.96	mg/L	1	12/15/2022 11:18	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		56	mg/L	5	12/19/2022 20:28	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		3.76	mg/L	1	12/20/2022 18:50	201100
Lithium	NELAP	0.0050		0.0566	mg/L	1	12/20/2022 18:50	201100
Magnesium	NELAP	0.0500		1.80	mg/L	1	12/20/2022 18:50	201100
Potassium	NELAP	0.100		1.71	mg/L	1	12/20/2022 18:50	201100
Sodium	NELAP	0.0500	S	319	mg/L	1	12/20/2022 18:50	201100
<i>Matrix spike control limits for Na are not applicable due to high sample/spike ratio.</i>								
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	S	< 0.0010	mg/L	5	12/19/2022 23:02	201100
Arsenic	NELAP	0.0010	J	0.0005	mg/L	5	12/20/2022 14:31	201100
Barium	NELAP	0.0010		0.0476	mg/L	5	12/20/2022 14:31	201100
Beryllium	NELAP	0.0010	S	< 0.0010	mg/L	5	12/19/2022 23:02	201100
Boron	NELAP	0.0250		1.03	mg/L	5	12/20/2022 14:31	201100
Cadmium	NELAP	0.0010	S	< 0.0010	mg/L	5	12/19/2022 23:02	201100
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 14:31	201100
Cobalt	NELAP	0.0010	S	< 0.0010	mg/L	5	12/19/2022 23:02	201100
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 14:31	201100
Molybdenum	NELAP	0.0015		0.0393	mg/L	5	12/20/2022 14:31	201100
Selenium	NELAP	0.0010	S	< 0.0010	mg/L	5	12/19/2022 23:02	201100
Thallium	NELAP	0.0020	S	< 0.0020	mg/L	5	12/19/2022 23:02	201100
<i>Matrix spike recovered outside upper control limits for Sb, Be, Cd, Co, Se, and TL. Sample results are below the reporting limit. Data is reportable.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/19/2022 17:08	201162





## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120972-005  
 Matrix: GROUNDWATER

Work Order: 22120972  
 Report Date: 28-Dec-22  
 Client Sample ID: MW-392  
 Collection Date: 12/13/2022 16:07

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		381	mg/L	1	12/16/2022 15:53	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	12/16/2022 15:53	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		1710	mg/L	1	12/15/2022 11:51	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		50	mg/L	1	12/19/2022 20:31	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		3.98	mg/L	1	12/15/2022 11:19	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	200		918	mg/L	50	12/20/2022 21:29	R322645
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		30.2	mg/L	1	12/20/2022 19:02	201100
Lithium	NELAP	0.0050		0.0646	mg/L	1	12/20/2022 19:02	201100
Magnesium	NELAP	0.0500		16.3	mg/L	1	12/20/2022 19:02	201100
Potassium	NELAP	0.100		4.98	mg/L	1	12/20/2022 19:02	201100
Sodium	NELAP	0.0500		700	mg/L	1	12/20/2022 19:02	201100
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	J	0.0007	mg/L	5	12/19/2022 22:50	201100
Arsenic	NELAP	0.0010		0.0024	mg/L	5	12/20/2022 14:18	201100
Barium	NELAP	0.0010		0.0462	mg/L	5	12/19/2022 22:50	201100
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 22:50	201100
Boron	NELAP	0.0250		2.33	mg/L	5	12/19/2022 22:50	201100
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 22:50	201100
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 14:18	201100
Cobalt	NELAP	0.0010	J	0.0003	mg/L	5	12/19/2022 22:50	201100
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 22:50	201100
Molybdenum	NELAP	0.0015		0.0019	mg/L	5	12/20/2022 14:18	201100
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 22:50	201100
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/19/2022 22:50	201100
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/19/2022 17:11	201162



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120972-006  
 Matrix: GROUNDWATER

Work Order: 22120972  
 Report Date: 28-Dec-22  
 Client Sample ID: MW-192  
 Collection Date: 12/13/2022 14:22

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		378	mg/L	1	12/16/2022 16:01	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	12/16/2022 16:01	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		490	mg/L	1	12/15/2022 11:51	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		50	mg/L	1	12/19/2022 20:39	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.45	mg/L	1	12/15/2022 11:21	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		37	mg/L	1	12/19/2022 20:39	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		67.5	mg/L	1	12/20/2022 19:05	201100
Lithium	NELAP	0.0050		0.0396	mg/L	1	12/20/2022 19:05	201100
Magnesium	NELAP	0.0500		26.3	mg/L	1	12/20/2022 19:05	201100
Potassium	NELAP	0.100		1.38	mg/L	1	12/20/2022 19:05	201100
Sodium	NELAP	0.0500		88.4	mg/L	1	12/20/2022 19:05	201100
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0021	mg/L	5	12/19/2022 22:56	201100
Arsenic	NELAP	0.0010		0.0032	mg/L	5	12/19/2022 22:56	201100
Barium	NELAP	0.0010		0.125	mg/L	5	12/19/2022 22:56	201100
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 22:56	201100
Boron	NELAP	0.0250		0.0686	mg/L	5	12/19/2022 22:56	201100
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 22:56	201100
Chromium	NELAP	0.0015	J	0.0014	mg/L	5	12/20/2022 14:24	201100
Cobalt	NELAP	0.0010		0.0021	mg/L	5	12/20/2022 14:24	201100
Lead	NELAP	0.0010		0.0017	mg/L	5	12/19/2022 22:56	201100
Molybdenum	NELAP	0.0015		0.0068	mg/L	5	12/22/2022 14:05	201100
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 22:56	201100
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/19/2022 22:56	201100
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020	S	< 0.00020	mg/L	1	12/20/2022 15:34	201208

*Matrix spike recovered outside upper control limits for Hg. Sample results are below the reporting limit. Data is reportable.*



## Sample Summary

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

**Client:** Ramboll

**Work Order:** 22120972

**Client Project:** Baldwin Part 845

**Report Date:** 28-Dec-22

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
22120972-001	MW-307	Groundwater	2	12/14/2022 9:48
22120972-002	MW-204	Groundwater	2	12/13/2022 9:26
22120972-003	MW-158R	Groundwater	2	12/13/2022 14:11
22120972-004	MW-258	Groundwater	2	12/13/2022 16:37
22120972-005	MW-392	Groundwater	2	12/13/2022 16:07
22120972-006	MW-192	Groundwater	2	12/13/2022 14:22



## Dates Report

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

Client: Ramboll

Work Order: 22120972

Client Project: Baldwin Part 845

Report Date: 28-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
22120972-001A	MW-307	12/14/2022 9:48	12/14/2022 20:12		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 15:21
	Standard Methods 2320 B 1997, 2011				12/16/2022 15:21
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 11:49
	SW-846 9036 (Total)				12/19/2022 19:40
	SW-846 9214 (Total)				12/15/2022 11:12
	SW-846 9251 (Total)				12/20/2022 21:18
22120972-001B	MW-307	12/14/2022 9:48	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/20/2022 18:39
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/19/2022 21:28
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/20/2022 13:59
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/22/2022 13:53
	SW-846 7470A (Total)			12/19/2022 9:34	12/19/2022 17:02
22120972-002A	MW-204	12/13/2022 9:26	12/14/2022 20:12		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 15:29
	Standard Methods 2320 B 1997, 2011				12/16/2022 15:29
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 11:50
	SW-846 9036 (Total)				12/19/2022 19:51
	SW-846 9214 (Total)				12/15/2022 11:14
	SW-846 9251 (Total)				12/19/2022 19:56
22120972-002B	MW-204	12/13/2022 9:26	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/20/2022 18:43
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/19/2022 21:35
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/20/2022 14:06
	SW-846 7470A (Total)			12/19/2022 9:34	12/19/2022 17:04
22120972-003A	MW-158R	12/13/2022 14:11	12/14/2022 20:12		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 15:37
	Standard Methods 2320 B 1997, 2011				12/16/2022 15:37
	Standard Methods 2540 C (Total) 1997, 2011				12/27/2022 11:11
	SW-846 9036 (Total)				12/19/2022 20:15
	SW-846 9214 (Total)				12/15/2022 11:16
	SW-846 9251 (Total)				12/19/2022 20:20
22120972-003B	MW-158R	12/13/2022 14:11	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/20/2022 18:47
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/19/2022 21:41
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/20/2022 14:12
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/22/2022 13:59



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22120972

**Client Project:** Baldwin Part 845

**Report Date:** 28-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name				Prep Date/Time	Analysis Date/Time
	SW-846 7470A (Total)			12/19/2022 9:34	12/19/2022 17:06
22120972-004A	MW-258	12/13/2022 16:37	12/14/2022 20:12		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 15:44
	Standard Methods 2320 B 1997, 2011				12/16/2022 15:44
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 11:50
	SW-846 9036 (Total)				12/19/2022 20:23
	SW-846 9214 (Total)				12/15/2022 11:18
	SW-846 9251 (Total)				12/19/2022 20:28
22120972-004B	MW-258	12/13/2022 16:37	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/20/2022 18:50
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/19/2022 23:02
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/20/2022 14:31
	SW-846 7470A (Total)			12/19/2022 9:34	12/19/2022 17:08
22120972-005A	MW-392	12/13/2022 16:07	12/14/2022 20:12		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 15:53
	Standard Methods 2320 B 1997, 2011				12/16/2022 15:53
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 11:51
	SW-846 9036 (Total)				12/19/2022 20:31
	SW-846 9214 (Total)				12/15/2022 11:19
	SW-846 9251 (Total)				12/20/2022 21:29
22120972-005B	MW-392	12/13/2022 16:07	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/20/2022 19:02
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/19/2022 22:50
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/20/2022 14:18
	SW-846 7470A (Total)			12/19/2022 9:34	12/19/2022 17:11
22120972-006A	MW-192	12/13/2022 14:22	12/14/2022 20:12		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 16:01
	Standard Methods 2320 B 1997, 2011				12/16/2022 16:01
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 11:51
	SW-846 9036 (Total)				12/19/2022 20:39
	SW-846 9214 (Total)				12/15/2022 11:21
	SW-846 9251 (Total)				12/19/2022 20:39
22120972-006B	MW-192	12/13/2022 14:22	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 7:03	12/20/2022 19:05
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/19/2022 22:56
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/20/2022 14:24
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 7:03	12/22/2022 14:05



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22120972

**Client Project:** Baldwin Part 845

**Report Date:** 28-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	SW-846 7470A (Total)			12/20/2022 8:15	12/20/2022 15:34



## Quality Control Results

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

Client: Ramboll

Work Order: 22120972

Client Project: Baldwin Part 845

Report Date: 28-Dec-22

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

Batch R322496		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	12/16/2022	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	12/16/2022	

Batch R322496		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Dissolved Solids		20		966	1000	0	96.6	90	110	12/16/2022	
Total Dissolved Solids		20		928	1000	0	92.8	90	110	12/15/2022	

Batch R322496		SampType: DUP		Units mg/L							RPD Limit: 5	Date Analyzed
SampID: 22120972-004ADUP												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Total Dissolved Solids		20		750				738.0	1.61	12/15/2022		

Batch R322712		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Dissolved Solids		20	S	22	16.00	0	137.5	-100	100	12/20/2022	
Total Dissolved Solids		20	S	34	16.00	0	212.5	-100	100	12/20/2022	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	12/20/2022	

Batch R322712		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Dissolved Solids		20		1000	1000	0	100.2	90	110	12/20/2022	
Total Dissolved Solids		20		960	1000	0	96.0	90	110	12/20/2022	
Total Dissolved Solids		20		970	1000	0	97.0	90	110	12/20/2022	

Batch R322885		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	12/27/2022	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	12/27/2022	
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	12/27/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22120972

Client Project: Baldwin Part 845

Report Date: 28-Dec-22

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

**Batch R322885**    **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		<b>972</b>	1000	0	97.2	90	110	12/27/2022
Total Dissolved Solids		20		<b>980</b>	1000	0	98.0	90	110	12/27/2022
Total Dissolved Solids		20		<b>976</b>	1000	0	97.6	90	110	12/27/2022

### SW-846 9036 (TOTAL)

**Batch R322574**    **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		<b>&lt; 10</b>	6.140	0	0	-100	100	12/19/2022

**Batch R322574**    **SampType: LCS**                      Units **mg/L**

SampID: ICB/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		<b>19</b>	20.00	0	94.8	90	110	12/19/2022

**Batch R322574**    **SampType: MS**                      Units **mg/L**

SampID: 22120972-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		50		<b>185</b>	100.0	87.73	97.1	85	115	12/19/2022

**Batch R322574**    **SampType: MSD**                      Units **mg/L**

SampID: 22120972-001AMSD

RPD Limit: 10

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		50		<b>184</b>	100.0	87.73	95.9	184.8	0.61	12/19/2022

**Batch R322638**    **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		<b>&lt; 10</b>	6.140	0	0	-100	100	12/20/2022

**Batch R322638**    **SampType: LCS**                      Units **mg/L**

SampID: ICB/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		<b>20</b>	20.00	0	101.8	90	110	12/20/2022





## Quality Control Results

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

Client: Ramboll

Work Order: 22120972

Client Project: Baldwin Part 845

Report Date: 28-Dec-22

### SW-846 9214 (TOTAL)

Batch R322419		SampType: MBLK		Units mg/L							
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		< 0.10	0.0370	0	0	-100	100	12/15/2022	

Batch R322419		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		1.03	1.000	0	102.5	90	110	12/15/2022	

Batch R322419		SampType: MS		Units mg/L							
SampID: 22120972-006AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.62	2.000	0.4520	108.6	75	125	12/15/2022	

Batch R322419		SampType: MSD		Units mg/L							
SampID: 22120972-006AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.61	2.000	0.4520	108.1	2.624	0.38	12/15/2022	

### SW-846 9251 (TOTAL)

Batch R322586		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	12/19/2022	

Batch R322586		SampType: LCS		Units mg/L							
SampID: ICB/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		20	20.00	0	100.6	90	110	12/19/2022	

Batch R322645		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	12/20/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22120972

Client Project: Baldwin Part 845

Report Date: 28-Dec-22

### SW-846 9251 (TOTAL)

Batch R322645		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		<b>20</b>	20.00	0	101.4	90	110	12/20/2022	

Batch R322645		SampType: MS		Units mg/L							
SampID: 22120972-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		80		<b>591</b>	400.0	226.0	91.3	85	115	12/20/2022	

Batch R322645		SampType: MSD		Units mg/L							
SampID: 22120972-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		80		<b>607</b>	400.0	226.0	95.2	591.4	2.55	12/20/2022	

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

Batch 201100		SampType: MBLK		Units mg/L							
SampID: MBLK-201100											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Calcium		0.100		< <b>0.100</b>	0.0350	0	0	-100	100	12/19/2022	
Calcium		0.100		< <b>0.100</b>	0.0350	0	0	-100	100	12/20/2022	
Lithium	*	0.0050		< <b>0.0050</b>	0.0019	0	0	-100	100	12/20/2022	
Lithium	*	0.0050		< <b>0.0050</b>	0.0019	0	0	-100	100	12/19/2022	
Magnesium		0.0500		< <b>0.0500</b>	0.0055	0	0	-100	100	12/19/2022	
Magnesium		0.0500		< <b>0.0500</b>	0.0055	0	0	-100	100	12/20/2022	
Potassium		0.100		< <b>0.100</b>	0.0400	0	0	-100	100	12/20/2022	
Potassium		0.100		< <b>0.100</b>	0.0400	0	0	-100	100	12/19/2022	
Sodium		0.0500		< <b>0.0500</b>	0.0180	0	0	-100	100	12/19/2022	
Sodium		0.0500		< <b>0.0500</b>	0.0180	0	0	-100	100	12/20/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22120972

Client Project: Baldwin Part 845

Report Date: 28-Dec-22

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

Batch 201100 SampType: LCS Units mg/L

SampID: LCS-201100

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		<b>2.52</b>	2.500	0	100.7	85	115	12/20/2022
Calcium		0.100		<b>2.46</b>	2.500	0	98.3	85	115	12/19/2022
Lithium	*	0.0050		<b>0.560</b>	0.5000	0	112.1	85	115	12/20/2022
Lithium	*	0.0050		<b>0.526</b>	0.5000	0	105.2	85	115	12/19/2022
Magnesium		0.0500		<b>2.45</b>	2.500	0	97.9	85	115	12/19/2022
Magnesium		0.0500		<b>2.54</b>	2.500	0	101.5	85	115	12/20/2022
Potassium		0.100		<b>2.46</b>	2.500	0	98.4	85	115	12/19/2022
Potassium		0.100		<b>2.48</b>	2.500	0	99.2	85	115	12/20/2022
Sodium		0.0500		<b>2.24</b>	2.500	0	89.4	85	115	12/19/2022
Sodium		0.0500		<b>2.32</b>	2.500	0	92.9	85	115	12/20/2022

Batch 201100 SampType: MS Units mg/L

SampID: 22120972-004BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		<b>6.26</b>	2.500	3.761	99.8	75	125	12/20/2022
Lithium		0.0050		<b>0.600</b>	0.5000	0.05660	108.7	75	125	12/20/2022
Magnesium		0.0500		<b>4.28</b>	2.500	1.805	98.8	75	125	12/20/2022
Potassium		0.100		<b>4.36</b>	2.500	1.707	106.0	75	125	12/20/2022
Sodium		0.0500	S	<b>320</b>	2.500	318.9	60.0	75	125	12/20/2022

Batch 201100 SampType: MSD Units mg/L

RPD Limit: 20

SampID: 22120972-004BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100		<b>6.30</b>	2.500	3.761	101.7	6.256	0.76	12/20/2022
Lithium		0.0050		<b>0.601</b>	0.5000	0.05660	108.8	0.6002	0.07	12/20/2022
Magnesium		0.0500		<b>4.34</b>	2.500	1.805	101.5	4.276	1.53	12/20/2022
Potassium		0.100		<b>4.40</b>	2.500	1.707	107.6	4.356	0.91	12/20/2022
Sodium		0.0500	S	<b>320</b>	2.500	318.9	52.0	320.4	0.06	12/20/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22120972

Client Project: Baldwin Part 845

Report Date: 28-Dec-22

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

Batch 201100    SampType: MBLK    Units mg/L

SampID: MBLK-201100

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	12/19/2022
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	12/19/2022
Barium		0.0010		< 0.0010	0.0007	0	0	-100	100	12/19/2022
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	12/19/2022
Boron		0.0250		< 0.0250	0.0093	0	0	-100	100	12/19/2022
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	12/19/2022
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	12/20/2022
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	12/19/2022
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	12/19/2022
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	12/20/2022
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	12/19/2022
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	12/19/2022

Batch 201100    SampType: LCS    Units mg/L

SampID: LCS-201100

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.510	0.5000	0	102.1	80	120	12/19/2022
Arsenic		0.0010		0.512	0.5000	0	102.5	80	120	12/19/2022
Barium		0.0010		1.99	2.000	0	99.3	80	120	12/19/2022
Beryllium		0.0010		0.0483	0.0500	0	96.6	80	120	12/19/2022
Boron		0.0250		0.486	0.5000	0	97.2	80	120	12/19/2022
Cadmium		0.0010		0.0481	0.0500	0	96.2	80	120	12/19/2022
Chromium		0.0015		0.212	0.2000	0	106.0	85	115	12/20/2022
Cobalt		0.0010		0.518	0.5000	0	103.5	80	120	12/19/2022
Lead		0.0010		0.517	0.5000	0	103.5	80	120	12/19/2022
Molybdenum		0.0015		0.495	0.5000	0	99.1	85	115	12/20/2022
Selenium		0.0010		0.473	0.5000	0	94.6	80	120	12/19/2022
Thallium		0.0020		0.231	0.2500	0	92.5	80	120	12/19/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22120972

Client Project: Baldwin Part 845

Report Date: 28-Dec-22

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

Batch 201100		SampType: MS		Units mg/L							Date Analyzed
SampID: 22120972-004BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010	S	<b>0.683</b>	0.5000	0	136.7	75	125	12/19/2022	
Arsenic		0.0010		<b>0.486</b>	0.5000	0.0005414	97.1	75	125	12/20/2022	
Barium		0.0010		<b>1.99</b>	2.000	0.04762	97.1	75	125	12/20/2022	
Beryllium		0.0010	S	<b>0.0640</b>	0.0500	0	128.0	75	125	12/19/2022	
Boron		0.0250		<b>1.57</b>	0.5000	1.030	107.5	75	125	12/20/2022	
Cadmium		0.0010		<b>0.0620</b>	0.0500	0	124.1	75	125	12/19/2022	
Chromium		0.0015		<b>0.186</b>	0.2000	0	92.9	75	125	12/20/2022	
Cobalt		0.0010	S	<b>0.642</b>	0.5000	0	128.3	75	125	12/19/2022	
Lead		0.0010		<b>0.489</b>	0.5000	0	97.7	75	125	12/20/2022	
Molybdenum		0.0015		<b>0.511</b>	0.5000	0.03931	94.4	75	125	12/20/2022	
Selenium		0.0010		<b>0.595</b>	0.5000	0	119.0	75	125	12/19/2022	
Thallium		0.0020		<b>0.293</b>	0.2500	0	117.2	75	125	12/19/2022	

Batch 201100		SampType: MSD		Units mg/L							RPD Limit: 20	Date Analyzed
SampID: 22120972-004BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Antimony		0.0010	S	<b>0.762</b>	0.5000	0	152.5	0.6833	10.94	12/19/2022		
Arsenic		0.0010		<b>0.498</b>	0.5000	0.0005414	99.5	0.4858	2.52	12/20/2022		
Barium		0.0010		<b>2.01</b>	2.000	0.04762	98.1	1.989	1.08	12/20/2022		
Beryllium		0.0010	S	<b>0.0714</b>	0.0500	0	142.8	0.06402	10.93	12/19/2022		
Boron		0.0250		<b>1.56</b>	0.5000	1.030	105.5	1.568	0.63	12/20/2022		
Cadmium		0.0010	S	<b>0.0710</b>	0.0500	0	142.0	0.06203	13.52	12/19/2022		
Chromium		0.0015		<b>0.199</b>	0.2000	0	99.4	0.1858	6.74	12/20/2022		
Cobalt		0.0010	S	<b>0.714</b>	0.5000	0	142.7	0.6416	10.62	12/19/2022		
Lead		0.0010		<b>0.484</b>	0.5000	0	96.8	0.4887	0.94	12/20/2022		
Molybdenum		0.0015		<b>0.501</b>	0.5000	0.03931	92.3	0.5115	2.13	12/20/2022		
Selenium		0.0010	S	<b>0.643</b>	0.5000	0	128.7	0.5951	7.80	12/19/2022		
Thallium		0.0020	S	<b>0.329</b>	0.2500	0	131.7	0.2930	11.66	12/19/2022		

### SW-846 7470A (TOTAL)

Batch 201162		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-201162											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>&lt; 0.00020</b>	0.0001	0	0	-100	100	12/19/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22120972

Client Project: Baldwin Part 845

Report Date: 28-Dec-22

### SW-846 7470A (TOTAL)

Batch 201162		SampType: LCS		Units mg/L						
SampID: LCS-201162										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		<b>0.00495</b>	0.0050	0	99.0	85	115	12/19/2022

Batch 201208		SampType: MBLK		Units mg/L						
SampID: MBLK-201208										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		<b>&lt; 0.00020</b>	0.0001	0	0	-100	100	12/20/2022

Batch 201208		SampType: LCS		Units mg/L						
SampID: LCS-201208										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		<b>0.00491</b>	0.0050	0	98.3	85	115	12/20/2022

Batch 201208		SampType: MS		Units mg/L						
SampID: 22120972-006BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020	S	<b>0.00675</b>	0.0050	0	135.0	75	125	12/20/2022

Batch 201208		SampType: MSD		Units mg/L						
SampID: 22120972-006BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020	S	<b>0.00702</b>	0.0050	0	140.4	0.006750	3.95	12/20/2022



# Receiving Check List

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

Client: Ramboll

Work Order: 22120972

Client Project: Baldwin Part 845

Report Date: 28-Dec-22

Carrier: Employee

Received By: SW

Completed by:

Reviewed by:

On:

On:

15-Dec-22

15-Dec-22

Lindsey Maddox

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

- |   |   |   |  |                                  |
|---|---|---|--|----------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             | Not Present <input type="checkbox"/>   | Temp °C <b>9.0</b>               |
| Type of thermal preservation?                           | None <input type="checkbox"/>           | Ice <input checked="" type="checkbox"/> | Blue Ice <input type="checkbox"/>      | Dry Ice <input type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Reported field parameters measured:                     | Field <input type="checkbox"/>          | Lab <input type="checkbox"/>            | NA <input checked="" type="checkbox"/> |                                  |
| Container/Temp Blank temperature in compliance?         | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/>  |  |                                  |

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

- |   |   |                             |   |
|---|---|-----------------------------|---|
| Water – at least one vial per sample has zero headspace?  | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | No VOA vials <input checked="" type="checkbox"/>      |
| Water - TOX containers have zero headspace?               | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | No TOX containers <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt?                       | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/>                           |
| NPDES/CWA TCN interferences checked/treated in the field? | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/>                |

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

pH strip #83856. - lmaddox - 12/15/2022 9:15:28 AM

The samples collected on 12/13/2 were out of temperature compliance upon receipt. Eric Bauer was notified of this error via work order summary. - lmaddox - 12/15/2022 9:16:46 AM





December 23, 2022

Eric Bauer  
Ramboll  
300 S. Wacker Drive  
Suite 130  
Chicago, IL 60606  
TEL: (414) 837-3687  
FAX: (414) 837-3608



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

**RE:** Baldwin Part 845

**WorkOrder:** 22120975

Dear Eric Bauer:

TEKLAB, INC received 6 samples on 12/14/2022 8:12:00 PM for the analysis presented in the following report.

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

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

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

Sincerely,



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



## Report Contents

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

**Client:** Ramboll

**Work Order:** 22120975

**Client Project:** Baldwin Part 845

**Report Date:** 23-Dec-22

**This reporting package includes the following:**

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Sample Summary	13
Dates Report	14
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**Client:** Ramboll

**Work Order:** 22120975

**Client Project:** Baldwin Part 845

**Report Date:** 23-Dec-22

### 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)

**Client:** Ramboll

**Work Order:** 22120975

**Client Project:** Baldwin Part 845

**Report Date:** 23-Dec-22

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### Qualifiers

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



## Case Narrative

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

**Client:** Ramboll

**Work Order:** 22120975

**Client Project:** Baldwin Part 845

**Report Date:** 23-Dec-22

**Cooler Receipt Temp:** 6.6 °C

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### Locations

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#### Collinsville

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

---

#### Collinsville Air

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

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#### Springfield

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

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#### Chicago

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

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#### Kansas City

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



## Accreditations

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

**Client:** Ramboll

**Work Order:** 22120975

**Client Project:** Baldwin Part 845

**Report Date:** 23-Dec-22

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



# Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120975-001  
 Matrix: AQUEOUS

Work Order: 22120975  
 Report Date: 23-Dec-22

Client Sample ID: EB-01

Collection Date: 12/12/2022 16:30

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		< 0.100	mg/L	1	12/19/2022 16:22	201130
Lithium	NELAP	0.0050		< 0.0050	mg/L	1	12/20/2022 12:58	201130
Magnesium	NELAP	0.0500		< 0.0500	mg/L	1	12/19/2022 16:22	201130
Potassium	NELAP	0.100		< 0.100	mg/L	1	12/19/2022 16:22	201130
Sodium	NELAP	0.0500		< 0.0500	mg/L	1	12/19/2022 16:22	201130
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:24	201130
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:24	201130
Barium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:24	201130
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:24	201130
Boron	NELAP	0.025	J	0.013	mg/L	5	12/20/2022 21:24	201130
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:24	201130
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 21:24	201130
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:24	201130
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:24	201130
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 21:24	201130
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 4:48	201130
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/20/2022 4:48	201130
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/20/2022 14:22	201170



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120975-002  
 Matrix: AQUEOUS

Work Order: 22120975  
 Report Date: 23-Dec-22

Client Sample ID: EB-02

Collection Date: 12/13/2022 16:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		< 0.100	mg/L	1	12/19/2022 16:26	201130
Lithium	NELAP	0.0050		< 0.0050	mg/L	1	12/20/2022 13:01	201130
Magnesium	NELAP	0.0500		< 0.0500	mg/L	1	12/19/2022 16:26	201130
Potassium	NELAP	0.100		< 0.100	mg/L	1	12/19/2022 16:26	201130
Sodium	NELAP	0.0500		0.0540	mg/L	1	12/19/2022 16:26	201130
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:30	201130
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:30	201130
Barium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:30	201130
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:30	201130
Boron	NELAP	0.0250		< 0.0250	mg/L	5	12/20/2022 21:30	201130
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:30	201130
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 21:30	201130
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:30	201130
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:30	201130
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 21:30	201130
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 4:54	201130
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/20/2022 4:54	201130
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/20/2022 14:29	201170





# Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120975-003  
 Matrix: AQUEOUS

Work Order: 22120975  
 Report Date: 23-Dec-22

Client Sample ID: EB-03

Collection Date: 12/13/2022 16:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		< 0.100	mg/L	1	12/19/2022 16:29	201130
Lithium	NELAP	0.0050	J	0.0019	mg/L	1	12/20/2022 13:40	201130
Magnesium	NELAP	0.0500		< 0.0500	mg/L	1	12/19/2022 16:29	201130
Potassium	NELAP	0.100		< 0.100	mg/L	1	12/19/2022 16:29	201130
Sodium	NELAP	0.0500		< 0.0500	mg/L	1	12/19/2022 16:29	201130
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:36	201130
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:36	201130
Barium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:36	201130
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:36	201130
Boron	NELAP	0.0250		< 0.0250	mg/L	5	12/20/2022 21:36	201130
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:36	201130
Chromium	NELAP	0.0015	J	0.0010	mg/L	5	12/20/2022 21:36	201130
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:36	201130
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:36	201130
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 21:36	201130
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 5:00	201130
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/20/2022 5:00	201130
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/20/2022 14:31	201170



# Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120975-004  
 Matrix: AQUEOUS

Work Order: 22120975  
 Report Date: 23-Dec-22

Client Sample ID: EB-04

Collection Date: 12/14/2022 18:53

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		< 0.100	mg/L	1	12/19/2022 16:33	201130
Lithium	NELAP	0.0050		< 0.0050	mg/L	1	12/20/2022 13:44	201130
Magnesium	NELAP	0.0500		< 0.0500	mg/L	1	12/19/2022 16:33	201130
Potassium	NELAP	0.100		< 0.100	mg/L	1	12/19/2022 16:33	201130
Sodium	NELAP	0.0500		< 0.0500	mg/L	1	12/19/2022 16:33	201130
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 22:07	201130
Arsenic	NELAP	0.0010	J	0.0005	mg/L	5	12/20/2022 22:07	201130
Barium	NELAP	0.0010		0.0041	mg/L	5	12/20/2022 22:07	201130
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 22:07	201130
Boron	NELAP	0.0250		< 0.0250	mg/L	5	12/20/2022 22:07	201130
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 22:07	201130
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 22:07	201130
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 22:07	201130
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 22:07	201130
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 22:07	201130
Selenium	NELAP	0.0010	S	< 0.0010	mg/L	5	12/20/2022 5:25	201130
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/20/2022 5:25	201130
<i>Matrix spike recovered outside upper control limits for Se. Sample results are below the reporting limit. Data is reportable.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/20/2022 14:33	201170



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120975-005  
 Matrix: AQUEOUS

Work Order: 22120975  
 Report Date: 23-Dec-22  
 Client Sample ID: EB-05  
 Collection Date: 12/14/2022 18:53

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		< 0.100	mg/L	1	12/19/2022 16:44	201130
Lithium	NELAP	0.0050		< 0.0050	mg/L	1	12/20/2022 14:00	201130
Magnesium	NELAP	0.0500		< 0.0500	mg/L	1	12/19/2022 16:44	201130
Potassium	NELAP	0.100		< 0.100	mg/L	1	12/19/2022 16:44	201130
Sodium	NELAP	0.0500		< 0.0500	mg/L	1	12/19/2022 16:44	201130
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:42	201130
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:42	201130
Barium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:42	201130
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:42	201130
Boron	NELAP	0.0250		< 0.0250	mg/L	5	12/20/2022 21:42	201130
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:42	201130
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 21:42	201130
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:42	201130
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:42	201130
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 21:42	201130
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 5:07	201130
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/20/2022 5:07	201130
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/20/2022 14:40	201170



# Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120975-006  
 Matrix: AQUEOUS

Work Order: 22120975  
 Report Date: 23-Dec-22

Client Sample ID: EB-06

Collection Date: 12/14/2022 18:53

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.10	J	0.046	mg/L	1	12/19/2022 16:48	201130
Lithium	NELAP	0.0050		< 0.0050	mg/L	1	12/20/2022 14:03	201130
Magnesium	NELAP	0.0500		< 0.0500	mg/L	1	12/19/2022 16:48	201130
Potassium	NELAP	0.100		< 0.100	mg/L	1	12/19/2022 16:48	201130
Sodium	NELAP	0.0500		< 0.0500	mg/L	1	12/19/2022 16:48	201130
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:49	201130
Arsenic	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:49	201130
Barium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:49	201130
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:49	201130
Boron	NELAP	0.0250		< 0.0250	mg/L	5	12/20/2022 21:49	201130
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:49	201130
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 21:49	201130
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:49	201130
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 21:49	201130
Molybdenum	NELAP	0.0015		< 0.0015	mg/L	5	12/20/2022 21:49	201130
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 5:13	201130
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/20/2022 5:13	201130
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/20/2022 14:42	201170



## Sample Summary

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

**Client:** Ramboll

**Work Order:** 22120975

**Client Project:** Baldwin Part 845

**Report Date:** 23-Dec-22

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
22120975-001	EB-01	Aqueous	1	12/12/2022 16:30
22120975-002	EB-02	Aqueous	1	12/13/2022 16:25
22120975-003	EB-03	Aqueous	1	12/13/2022 16:25
22120975-004	EB-04	Aqueous	1	12/14/2022 18:53
22120975-005	EB-05	Aqueous	1	12/14/2022 18:53
22120975-006	EB-06	Aqueous	1	12/14/2022 18:53



## Dates Report

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

Client: Ramboll

Work Order: 22120975

Client Project: Baldwin Part 845

Report Date: 23-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
22120975-001A	EB-01	12/12/2022 16:30	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:27	12/19/2022 16:22
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:27	12/20/2022 12:58
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:27	12/20/2022 4:48
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:27	12/20/2022 21:24
	SW-846 7470A (Total)			12/19/2022 10:10	12/20/2022 14:22
22120975-002A	EB-02	12/13/2022 16:25	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:27	12/19/2022 16:26
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:27	12/20/2022 13:01
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:27	12/20/2022 4:54
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:27	12/20/2022 21:30
	SW-846 7470A (Total)			12/19/2022 10:10	12/20/2022 14:29
22120975-003A	EB-03	12/13/2022 16:25	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:27	12/19/2022 16:29
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:27	12/20/2022 13:40
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:27	12/20/2022 5:00
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:27	12/20/2022 21:36
	SW-846 7470A (Total)			12/19/2022 10:10	12/20/2022 14:31
22120975-004A	EB-04	12/14/2022 18:53	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:27	12/19/2022 16:33
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:27	12/20/2022 13:44
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:27	12/20/2022 5:25
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:27	12/20/2022 22:07
	SW-846 7470A (Total)			12/19/2022 10:10	12/20/2022 14:33
22120975-005A	EB-05	12/14/2022 18:53	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:27	12/19/2022 16:44
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:27	12/20/2022 14:00
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:27	12/20/2022 5:07
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:27	12/20/2022 21:42
	SW-846 7470A (Total)			12/19/2022 10:10	12/20/2022 14:40
22120975-006A	EB-06	12/14/2022 18:53	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:27	12/19/2022 16:48
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:27	12/20/2022 14:03
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:27	12/20/2022 5:13
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:27	12/20/2022 21:49
	SW-846 7470A (Total)			12/19/2022 10:10	12/20/2022 14:42



## Quality Control Results

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

Client: Ramboll

Work Order: 22120975

Client Project: Baldwin Part 845

Report Date: 23-Dec-22

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

Batch 201130    SampType: MBLK    Units mg/L

SampID: MBLK-201130

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	12/19/2022
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	12/19/2022
Lithium	*	0.0050		< 0.0050	0.0019	0	0	-100	100	12/20/2022
Lithium	*	0.0050		< 0.0050	0.0019	0	0	-100	100	12/19/2022
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	12/19/2022
Magnesium		0.0500		< 0.0500	0.0055	0	0	-100	100	12/19/2022
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	12/19/2022
Potassium		0.100		< 0.100	0.0400	0	0	-100	100	12/19/2022
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	12/19/2022
Sodium		0.0500		< 0.0500	0.0180	0	0	-100	100	12/19/2022

Batch 201130    SampType: LCS    Units mg/L

SampID: LCS-201130

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		2.65	2.500	0	106.0	85	115	12/19/2022
Calcium		0.100		2.55	2.500	0	101.9	85	115	12/19/2022
Lithium	*	0.0050		0.559	0.5000	0	111.8	85	115	12/20/2022
Lithium	*	0.0050		0.553	0.5000	0	110.7	85	115	12/19/2022
Magnesium		0.0500		2.57	2.500	0	102.8	85	115	12/19/2022
Magnesium		0.0500		2.64	2.500	0	105.7	85	115	12/19/2022
Potassium		0.100		2.54	2.500	0	101.6	85	115	12/19/2022
Potassium		0.100		2.60	2.500	0	104.1	85	115	12/19/2022
Sodium		0.0500		2.41	2.500	0	96.5	85	115	12/19/2022
Sodium		0.0500		2.35	2.500	0	93.8	85	115	12/19/2022

Batch 201130    SampType: MS    Units mg/L

SampID: 22120975-004AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		2.65	2.500	0	105.9	75	125	12/19/2022
Lithium		0.0050		0.560	0.5000	0	112.0	75	125	12/20/2022
Magnesium		0.0500		2.64	2.500	0	105.6	75	125	12/19/2022
Potassium		0.100		2.60	2.500	0	104.0	75	125	12/19/2022
Sodium		0.0500		2.42	2.500	0	96.6	75	125	12/19/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22120975

Client Project: Baldwin Part 845

Report Date: 23-Dec-22

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

Batch 201130		SampType: MSD		Units mg/L				RPD Limit: 20			Date Analyzed
SampID: 22120975-004AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100		<b>2.61</b>	2.500	0	104.5	2.647	1.33	12/19/2022	
Lithium		0.0050		<b>0.556</b>	0.5000	0	111.3	0.5599	0.65	12/20/2022	
Magnesium		0.0500		<b>2.60</b>	2.500	0	103.9	2.641	1.64	12/19/2022	
Potassium		0.100		<b>2.60</b>	2.500	0	104.0	2.601	0.04	12/19/2022	
Sodium		0.0500		<b>2.40</b>	2.500	0	96.0	2.416	0.71	12/19/2022	

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

Batch 201130		SampType: MBLK		Units mg/L						Date Analyzed
SampID: MBLK-201130										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	12/20/2022
Antimony		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	12/20/2022
Arsenic		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	12/20/2022
Barium		0.0010		< <b>0.0010</b>	0.0007	0	0	-100	100	12/20/2022
Beryllium		0.0010		< <b>0.0010</b>	0.0002	0	0	-100	100	12/20/2022
Boron		0.0250		< <b>0.0250</b>	0.0093	0	0	-100	100	12/20/2022
Cadmium		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	12/20/2022
Chromium		0.0015		< <b>0.0015</b>	0.0007	0	0	-100	100	12/20/2022
Cobalt		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	12/20/2022
Lead		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	12/20/2022
Molybdenum		0.0015		< <b>0.0015</b>	0.0006	0	0	-100	100	12/20/2022
Selenium		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	12/20/2022
Thallium		0.0020		< <b>0.0020</b>	0.0010	0	0	-100	100	12/20/2022





## Quality Control Results

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

Client: Ramboll

Work Order: 22120975

Client Project: Baldwin Part 845

Report Date: 23-Dec-22

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

Batch 201130      SampType: LCS      Units mg/L

SampID: LCS-201130

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		<b>0.525</b>	0.5000	0	105.1	85	115	12/20/2022
Arsenic		0.0010	S	<b>0.615</b>	0.5000	0	123.0	85	115	12/20/2022
Arsenic		0.0010		<b>0.507</b>	0.5000	0	101.5	85	115	12/20/2022
Barium		0.0010		<b>2.02</b>	2.000	0	100.9	85	115	12/20/2022
Beryllium		0.0010		<b>0.0479</b>	0.0500	0	95.8	85	115	12/20/2022
Boron		0.0250		<b>0.525</b>	0.5000	0	104.9	85	115	12/20/2022
Cadmium		0.0010		<b>0.0492</b>	0.0500	0	98.3	85	115	12/20/2022
Chromium		0.0015		<b>0.201</b>	0.2000	0	100.7	85	115	12/20/2022
Cobalt		0.0010		<b>0.484</b>	0.5000	0	96.8	85	115	12/20/2022
Lead		0.0010		<b>0.497</b>	0.5000	0	99.3	85	115	12/20/2022
Molybdenum		0.0015		<b>0.481</b>	0.5000	0	96.3	85	115	12/20/2022
Selenium		0.0010		<b>0.573</b>	0.5000	0	114.6	85	115	12/20/2022
Thallium		0.0020		<b>0.263</b>	0.2500	0	105.1	85	115	12/20/2022

Batch 201130      SampType: MS      Units mg/L

SampID: 22120975-004AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		<b>0.509</b>	0.5000	0	101.7	75	125	12/20/2022
Arsenic		0.0010		<b>0.496</b>	0.5000	0.0005363	99.0	75	125	12/20/2022
Barium		0.0010		<b>1.98</b>	2.000	0.004144	98.7	75	125	12/20/2022
Beryllium		0.0010		<b>0.0433</b>	0.0500	0	86.7	75	125	12/20/2022
Boron		0.0250		<b>0.461</b>	0.5000	0	92.2	75	125	12/20/2022
Cadmium		0.0010		<b>0.0480</b>	0.0500	0	95.9	75	125	12/20/2022
Chromium		0.0015		<b>0.194</b>	0.2000	0	96.8	75	125	12/20/2022
Cobalt		0.0010		<b>0.484</b>	0.5000	0	96.7	75	125	12/20/2022
Lead		0.0010		<b>0.463</b>	0.5000	0	92.6	75	125	12/20/2022
Molybdenum		0.0015		<b>0.467</b>	0.5000	0	93.4	75	125	12/20/2022
Selenium		0.0010	S	<b>0.648</b>	0.5000	0	129.6	75	125	12/20/2022
Thallium		0.0020		<b>0.310</b>	0.2500	0	124.1	75	125	12/20/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22120975

Client Project: Baldwin Part 845

Report Date: 23-Dec-22

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

Batch 201130		SampType: MSD		Units mg/L				RPD Limit: 20			
SampID: 22120975-004AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Antimony		0.0010		<b>0.538</b>	0.5000	0	107.5	0.5085	5.58	12/20/2022	
Arsenic		0.0010		<b>0.545</b>	0.5000	0.0005363	108.8	0.4957	9.41	12/20/2022	
Barium		0.0010		<b>2.04</b>	2.000	0.004144	102.0	1.978	3.27	12/20/2022	
Beryllium		0.0010		<b>0.0478</b>	0.0500	0	95.6	0.04334	9.78	12/20/2022	
Boron		0.0250		<b>0.504</b>	0.5000	0	100.7	0.4610	8.83	12/20/2022	
Cadmium		0.0010		<b>0.0507</b>	0.0500	0	101.4	0.04796	5.54	12/20/2022	
Chromium		0.0015		<b>0.204</b>	0.2000	0	101.8	0.1936	5.05	12/20/2022	
Cobalt		0.0010		<b>0.511</b>	0.5000	0	102.2	0.4835	5.48	12/20/2022	
Lead		0.0010		<b>0.481</b>	0.5000	0	96.2	0.4632	3.81	12/20/2022	
Molybdenum		0.0015		<b>0.502</b>	0.5000	0	100.5	0.4672	7.24	12/20/2022	
Selenium		0.0010		<b>0.602</b>	0.5000	0	120.3	0.6482	7.46	12/20/2022	
Thallium		0.0020		<b>0.301</b>	0.2500	0	120.5	0.3102	2.96	12/20/2022	

### SW-846 7470A (TOTAL)

Batch 201170		SampType: MBLK		Units mg/L							
SampID: MBLK-201170											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>&lt; 0.00020</b>	0.0001	0	0	-100	100	12/21/2022	

Batch 201170		SampType: LCS		Units mg/L							
SampID: LCS-201170											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00513</b>	0.0050	0	102.6	85	115	12/20/2022	

Batch 201170		SampType: MS		Units mg/L							
SampID: 22120975-004AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>0.00492</b>	0.0050	0	98.4	75	125	12/20/2022	

Batch 201170		SampType: MSD		Units mg/L				RPD Limit: 15			
SampID: 22120975-004AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		<b>0.00489</b>	0.0050	0	97.9	0.004920	0.53	12/20/2022	



# Receiving Check List

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

Client: Ramboll

Work Order: 22120975

Client Project: Baldwin Part 845

Report Date: 23-Dec-22

Carrier: Employee

Received By: SW

Completed by:

Reviewed by:

On:

On:

15-Dec-22

15-Dec-22

Payton Yoch

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

- Shipping container/cooler in good condition? Yes  No  Not Present  Temp °C **6.6**
- 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 83856 - LM/pyoch - 12/15/2022 9:38:02 AM



December 27, 2022

Eric Bauer  
Ramboll  
300 S. Wacker Drive  
Suite 130  
Chicago, IL 60606  
TEL: (414) 837-3687  
FAX: (414) 837-3608



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

**RE:** Baldwin Part 845

**WorkOrder:** 22120976

Dear Eric Bauer:

TEKLAB, INC received 10 samples on 12/14/2022 8:12:00 PM for the analysis presented in the following report.

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

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

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

Sincerely,



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



## Report Contents

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

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**Client:** Ramboll

**Work Order:** 22120976

**Client Project:** Baldwin Part 845

**Report Date:** 27-Dec-22

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**This reporting package includes the following:**

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Dates Report	18
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Chain of Custody	Appended

**Client:** Ramboll

**Work Order:** 22120976

**Client Project:** Baldwin Part 845

**Report Date:** 27-Dec-22

### 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)

**Client:** Ramboll

**Work Order:** 22120976

**Client Project:** Baldwin Part 845

**Report Date:** 27-Dec-22

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### Qualifiers

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





## Case Narrative

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

**Client:** Ramboll

**Work Order:** 22120976

**Client Project:** Baldwin Part 845

**Report Date:** 27-Dec-22

**Cooler Receipt Temp:** 4.8 °C

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### Locations

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#### Collinsville

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

---

#### Collinsville Air

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

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#### Springfield

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

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#### Chicago

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

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#### Kansas City

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



## Accreditations

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

**Client:** Ramboll

**Work Order:** 22120976

**Client Project:** Baldwin Part 845

**Report Date:** 27-Dec-22

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



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120976-001  
 Matrix: GROUNDWATER

Work Order: 22120976  
 Report Date: 27-Dec-22  
 Client Sample ID: MW-358  
 Collection Date: 12/13/2022 15:33

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		859	mg/L	1	12/16/2022 12:40	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	12/16/2022 12:40	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	100		3260	mg/L	5	12/15/2022 15:21	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		71	mg/L	5	12/19/2022 20:47	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		2.10	mg/L	1	12/15/2022 11:26	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	200		1120	mg/L	50	12/19/2022 20:52	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		18.6	mg/L	1	12/21/2022 1:17	201132
Lithium	NELAP	0.0050		0.0696	mg/L	1	12/21/2022 1:17	201132
Magnesium	NELAP	0.0500		8.62	mg/L	1	12/21/2022 1:17	201132
Potassium	NELAP	0.100		6.51	mg/L	1	12/21/2022 1:17	201132
Sodium	NELAP	0.0500		1100	mg/L	1	12/21/2022 1:17	201132
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0015	mg/L	5	12/19/2022 23:23	201132
Arsenic	NELAP	0.0010		0.0034	mg/L	5	12/19/2022 23:23	201132
Barium	NELAP	0.0010		0.168	mg/L	5	12/19/2022 23:23	201132
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:23	201132
Boron	NELAP	0.0250		1.67	mg/L	5	12/23/2022 16:51	201132
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:23	201132
Chromium	NELAP	0.0015		0.0044	mg/L	5	12/21/2022 20:15	201132
Cobalt	NELAP	0.0010	J	0.0008	mg/L	5	12/19/2022 23:23	201132
Lead	NELAP	0.0010	J	0.0008	mg/L	5	12/19/2022 23:23	201132
Molybdenum	NELAP	0.0015		0.0388	mg/L	5	12/19/2022 23:23	201132
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:23	201132
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/21/2022 20:15	201132
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/20/2022 14:45	201170



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120976-002  
 Matrix: GROUNDWATER

Work Order: 22120976  
 Report Date: 27-Dec-22  
 Client Sample ID: MW-394  
 Collection Date: 12/14/2022 16:22

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		604	mg/L	1	12/16/2022 12:58	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	12/16/2022 12:58	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		1950	mg/L	1	12/15/2022 15:22	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		299	mg/L	10	12/19/2022 21:11	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		3.86	mg/L	1	12/15/2022 11:28	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	80		554	mg/L	20	12/19/2022 21:16	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		26.1	mg/L	1	12/21/2022 1:20	201132
Lithium	NELAP	0.0050		0.0619	mg/L	1	12/21/2022 1:20	201132
Magnesium	NELAP	0.0500		10.9	mg/L	1	12/21/2022 1:20	201132
Potassium	NELAP	0.100		4.68	mg/L	1	12/21/2022 1:20	201132
Sodium	NELAP	0.0500		802	mg/L	1	12/21/2022 1:20	201132
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0014	mg/L	5	12/19/2022 23:29	201132
Arsenic	NELAP	0.0010		0.0010	mg/L	5	12/19/2022 23:29	201132
Barium	NELAP	0.0010		0.0312	mg/L	5	12/19/2022 23:29	201132
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:29	201132
Boron	NELAP	0.0250		2.02	mg/L	5	12/23/2022 17:35	201132
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:29	201132
Chromium	NELAP	0.0015		0.0031	mg/L	5	12/23/2022 17:35	201132
Cobalt	NELAP	0.0010	J	0.0004	mg/L	5	12/19/2022 23:29	201132
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:29	201132
Molybdenum	NELAP	0.0015		0.0116	mg/L	5	12/19/2022 23:29	201132
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:29	201132
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/21/2022 20:59	201132
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/20/2022 14:47	201170



# Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120976-003  
 Matrix: GROUNDWATER

Work Order: 22120976  
 Report Date: 27-Dec-22  
 Client Sample ID: MW-194  
 Collection Date: 12/14/2022 13:54

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO3)	NELAP	0		307	mg/L	1	12/16/2022 13:06	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO3)	NELAP	0		0	mg/L	1	12/16/2022 13:06	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		482	mg/L	1	12/15/2022 15:22	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		112	mg/L	5	12/19/2022 21:32	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.30	mg/L	1	12/15/2022 11:33	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		31	mg/L	1	12/19/2022 21:22	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		88.6	mg/L	1	12/21/2022 1:24	201132
Lithium	NELAP	0.0050		0.0103	mg/L	1	12/21/2022 1:24	201132
Magnesium	NELAP	0.0500		35.0	mg/L	1	12/21/2022 1:24	201132
Potassium	NELAP	0.100		1.01	mg/L	1	12/21/2022 1:24	201132
Sodium	NELAP	0.0500		53.9	mg/L	1	12/21/2022 1:24	201132
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	J	0.0007	mg/L	5	12/19/2022 23:36	201132
Arsenic	NELAP	0.0010		0.0012	mg/L	5	12/19/2022 23:36	201132
Barium	NELAP	0.0010		0.141	mg/L	5	12/19/2022 23:36	201132
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:36	201132
Boron	NELAP	0.025	J	0.019	mg/L	5	12/23/2022 19:03	201132
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:36	201132
Chromium	NELAP	0.0015		0.0026	mg/L	5	12/23/2022 19:03	201132
Cobalt	NELAP	0.0010		0.0015	mg/L	5	12/19/2022 23:36	201132
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:36	201132
Molybdenum	NELAP	0.0015		0.0031	mg/L	5	12/19/2022 23:36	201132
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:36	201132
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/21/2022 21:05	201132
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/20/2022 14:49	201170



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120976-004  
 Matrix: GROUNDWATER

Work Order: 22120976  
 Report Date: 27-Dec-22  
 Client Sample ID: MW-306  
 Collection Date: 12/14/2022 12:23

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	12/16/2022 13:12	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		81	mg/L	1	12/16/2022 13:12	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		272	mg/L	1	12/15/2022 15:22	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	10		41	mg/L	1	12/19/2022 21:43	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.60	mg/L	1	12/15/2022 11:35	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		61	mg/L	5	12/19/2022 21:48	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		17.0	mg/L	1	12/21/2022 1:28	201132
Lithium	NELAP	0.0050		0.0187	mg/L	1	12/21/2022 1:28	201132
Magnesium	NELAP	0.0500		0.0926	mg/L	1	12/21/2022 1:28	201132
Potassium	NELAP	0.100		1.09	mg/L	1	12/21/2022 1:28	201132
Sodium	NELAP	0.0500		91.5	mg/L	1	12/21/2022 1:28	201132
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0011	mg/L	5	12/19/2022 23:42	201132
Arsenic	NELAP	0.0010		0.0053	mg/L	5	12/19/2022 23:42	201132
Barium	NELAP	0.0010		0.0083	mg/L	5	12/19/2022 23:42	201132
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:42	201132
Boron	NELAP	0.0250		0.309	mg/L	5	12/23/2022 19:09	201132
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:42	201132
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	12/21/2022 21:10	201132
Cobalt	NELAP	0.0010	J	0.0001	mg/L	5	12/19/2022 23:42	201132
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:42	201132
Molybdenum	NELAP	0.0015		0.0215	mg/L	5	12/19/2022 23:42	201132
Selenium	NELAP	0.0010	J	0.0006	mg/L	5	12/19/2022 23:42	201132
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/21/2022 21:10	201132
<i>CCV recovered outside the upper control limits for Cr. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/20/2022 14:56	201170



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120976-005  
 Matrix: GROUNDWATER

Work Order: 22120976  
 Report Date: 27-Dec-22  
 Client Sample ID: MW-370  
 Collection Date: 12/14/2022 11:14

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		394	mg/L	1	12/16/2022 13:20	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	12/16/2022 13:20	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		2680	mg/L	1	12/15/2022 15:24	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		263	mg/L	10	12/19/2022 22:07	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		3.12	mg/L	1	12/15/2022 11:37	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	200		1430	mg/L	50	12/19/2022 22:12	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		44.7	mg/L	1	12/21/2022 1:31	201132
Lithium	NELAP	0.0050		0.118	mg/L	1	12/21/2022 1:31	201132
Magnesium	NELAP	0.0500		25.4	mg/L	1	12/21/2022 1:31	201132
Potassium	NELAP	0.100		6.04	mg/L	1	12/21/2022 1:31	201132
Sodium	NELAP	0.0500		1140	mg/L	1	12/21/2022 1:31	201132
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010	J	0.0005	mg/L	5	12/19/2022 23:48	201132
Arsenic	NELAP	0.0010	J	0.0008	mg/L	5	12/19/2022 23:48	201132
Barium	NELAP	0.0010		0.0325	mg/L	5	12/19/2022 23:48	201132
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:48	201132
Boron	NELAP	0.0250		2.34	mg/L	5	12/23/2022 19:16	201132
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:48	201132
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	12/21/2022 21:16	201132
Cobalt	NELAP	0.0010	J	0.0001	mg/L	5	12/19/2022 23:48	201132
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:48	201132
Molybdenum	NELAP	0.0015		0.0097	mg/L	5	12/19/2022 23:48	201132
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:48	201132
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/21/2022 21:16	201132
<i>CCV recovered outside the upper control limits for Cr. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/20/2022 15:03	201170



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120976-006  
 Matrix: GROUNDWATER

Work Order: 22120976  
 Report Date: 27-Dec-22  
 Client Sample ID: TPZ-164  
 Collection Date: 12/14/2022 10:06

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		233	mg/L	1	12/16/2022 13:27	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	12/16/2022 13:27	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	100		310	mg/L	5	12/15/2022 15:24	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		120	mg/L	5	12/19/2022 22:20	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.27	mg/L	1	12/15/2022 11:39	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		55	mg/L	5	12/19/2022 22:20	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		60.9	mg/L	1	12/21/2022 1:35	201132
Lithium	NELAP	0.0050		0.0114	mg/L	1	12/21/2022 1:35	201132
Magnesium	NELAP	0.0500		25.4	mg/L	1	12/21/2022 1:35	201132
Potassium	NELAP	0.100		9.85	mg/L	1	12/21/2022 1:35	201132
Sodium	NELAP	0.0500		76.8	mg/L	1	12/21/2022 1:35	201132
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:55	201132
Arsenic	NELAP	0.0010	J	0.0009	mg/L	5	12/19/2022 23:55	201132
Barium	NELAP	0.0010		0.0548	mg/L	5	12/19/2022 23:55	201132
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:55	201132
Boron	NELAP	0.0250		1.54	mg/L	5	12/23/2022 19:22	201132
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:55	201132
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	12/21/2022 21:21	201132
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:55	201132
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:55	201132
Molybdenum	NELAP	0.0015		0.0166	mg/L	5	12/19/2022 23:55	201132
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/19/2022 23:55	201132
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/21/2022 21:21	201132
<i>CCV recovered outside the upper control limits for Cr. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/20/2022 15:05	201170





## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120976-007  
 Matrix: GROUNDWATER

Work Order: 22120976  
 Report Date: 27-Dec-22  
 Client Sample ID: MW-304  
 Collection Date: 12/14/2022 8:31

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		833	mg/L	1	12/16/2022 13:32	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	12/16/2022 13:32	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		1300	mg/L	1	12/15/2022 15:25	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		216	mg/L	5	12/19/2022 22:23	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		1.82	mg/L	1	12/15/2022 11:41	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		181	mg/L	5	12/19/2022 22:23	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		10.0	mg/L	1	12/21/2022 1:54	201132
Lithium	NELAP	0.0050		0.0756	mg/L	1	12/21/2022 1:54	201132
Magnesium	NELAP	0.0500		4.23	mg/L	1	12/21/2022 1:54	201132
Potassium	NELAP	0.100		2.05	mg/L	1	12/21/2022 1:54	201132
Sodium	NELAP	0.0500		604	mg/L	1	12/21/2022 1:54	201132
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 0:01	201132
Arsenic	NELAP	0.0010		0.0030	mg/L	5	12/20/2022 0:01	201132
Barium	NELAP	0.0010		0.0191	mg/L	5	12/20/2022 0:01	201132
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 0:01	201132
Boron	NELAP	0.0250		2.16	mg/L	5	12/23/2022 19:28	201132
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 0:01	201132
Chromium	NELAP	0.0015		< 0.0015	mg/L	5	12/21/2022 21:27	201132
Cobalt	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 0:01	201132
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 0:01	201132
Molybdenum	NELAP	0.0015	J	0.0009	mg/L	5	12/20/2022 0:01	201132
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 0:01	201132
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/21/2022 21:27	201132
<i>CCV recovered outside the upper control limits for Cr. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/20/2022 15:07	201170



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120976-008  
 Matrix: GROUNDWATER

Work Order: 22120976  
 Report Date: 27-Dec-22  
 Client Sample ID: MW-203  
 Collection Date: 12/14/2022 11:28

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		367	mg/L	1	12/16/2022 13:41	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		106	mg/L	1	12/16/2022 13:41	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		1750	mg/L	1	12/15/2022 15:25	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		71	mg/L	5	12/19/2022 22:36	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		2.54	mg/L	1	12/15/2022 11:43	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	20		178	mg/L	5	12/19/2022 22:36	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		12.2	mg/L	1	12/21/2022 1:57	201132
Lithium	NELAP	0.0050		0.0353	mg/L	1	12/21/2022 1:57	201132
Magnesium	NELAP	0.0500		9.23	mg/L	1	12/21/2022 1:57	201132
Potassium	NELAP	0.100		3.17	mg/L	1	12/21/2022 1:57	201132
Sodium	NELAP	0.0500		350	mg/L	1	12/21/2022 1:57	201132
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 0:07	201132
Arsenic	NELAP	0.0010		0.0015	mg/L	5	12/20/2022 0:07	201132
Barium	NELAP	0.0010		0.0911	mg/L	5	12/20/2022 0:07	201132
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 0:07	201132
Boron	NELAP	0.0250		0.907	mg/L	5	12/23/2022 19:34	201132
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 0:07	201132
Chromium	NELAP	0.0015		0.0038	mg/L	5	12/23/2022 19:34	201132
Cobalt	NELAP	0.0010	J	0.0007	mg/L	5	12/20/2022 0:07	201132
Lead	NELAP	0.0010	J	0.0009	mg/L	5	12/20/2022 0:07	201132
Molybdenum	NELAP	0.0015		0.0090	mg/L	5	12/20/2022 0:07	201132
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 0:07	201132
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/21/2022 21:32	201132
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/20/2022 15:10	201170



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120976-009  
 Matrix: GROUNDWATER

Work Order: 22120976  
 Report Date: 27-Dec-22  
 Client Sample ID: MW-393  
 Collection Date: 12/14/2022 16:35

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		628	mg/L	1	12/16/2022 13:49	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		38	mg/L	1	12/16/2022 13:49	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		826	mg/L	1	12/15/2022 15:25	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	100		263	mg/L	10	12/19/2022 22:39	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		5.79	mg/L	1	12/15/2022 11:45	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	40		445	mg/L	10	12/19/2022 22:39	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100		10.9	mg/L	1	12/21/2022 2:01	201132
Lithium	NELAP	0.0050		0.0603	mg/L	1	12/21/2022 2:01	201132
Magnesium	NELAP	0.0500		5.06	mg/L	1	12/21/2022 2:01	201132
Potassium	NELAP	0.100		4.20	mg/L	1	12/21/2022 2:01	201132
Sodium	NELAP	0.0500		766	mg/L	1	12/21/2022 2:01	201132
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		0.0024	mg/L	5	12/20/2022 0:39	201132
Arsenic	NELAP	0.0010		0.0019	mg/L	5	12/20/2022 0:39	201132
Barium	NELAP	0.0010		0.0246	mg/L	5	12/20/2022 0:39	201132
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 0:39	201132
Boron	NELAP	0.0250		2.04	mg/L	5	12/23/2022 19:41	201132
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 0:39	201132
Chromium	NELAP	0.0015	J	0.0009	mg/L	5	12/21/2022 22:32	201132
Cobalt	NELAP	0.0010	J	0.0002	mg/L	5	12/20/2022 0:39	201132
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 0:39	201132
Molybdenum	NELAP	0.0015		0.0135	mg/L	5	12/20/2022 0:39	201132
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 0:39	201132
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/21/2022 22:32	201132
<i>CCV recovered outside the upper control limits for Cr. Sample results are below the reporting limit. Data is reportable per the TNI standard.</i>								
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/20/2022 15:12	201170



## Laboratory Results

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

Client: Ramboll  
 Client Project: Baldwin Part 845  
 Lab ID: 22120976-010  
 Matrix: GROUNDWATER

Work Order: 22120976  
 Report Date: 27-Dec-22  
 Client Sample ID: MW-193  
 Collection Date: 12/14/2022 13:55

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 2320 B (TOTAL) 1997, 2011</b>								
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	NELAP	0		321	mg/L	1	12/16/2022 13:57	R322500
<b>STANDARD METHODS 2320 B 1997, 2011</b>								
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	NELAP	0		0	mg/L	1	12/16/2022 13:57	R322500
<b>STANDARD METHODS 2540 C (TOTAL) 1997, 2011</b>								
Total Dissolved Solids	NELAP	20		584	mg/L	1	12/15/2022 15:31	R322496
<b>SW-846 9036 (TOTAL)</b>								
Sulfate	NELAP	50		165	mg/L	5	12/19/2022 23:08	R322574
<b>SW-846 9214 (TOTAL)</b>								
Fluoride	NELAP	0.10		0.27	mg/L	1	12/15/2022 11:47	R322419
<b>SW-846 9251 (TOTAL)</b>								
Chloride	NELAP	4		37	mg/L	1	12/19/2022 23:03	R322586
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Calcium	NELAP	0.100	S	96.5	mg/L	1	12/21/2022 2:05	201132
Lithium	NELAP	0.0050		0.0057	mg/L	1	12/21/2022 2:05	201132
Magnesium	NELAP	0.0500	S	34.8	mg/L	1	12/21/2022 2:05	201132
Potassium	NELAP	0.100		0.888	mg/L	1	12/21/2022 2:05	201132
Sodium	NELAP	0.0500	S	77.7	mg/L	1	12/21/2022 2:05	201132
<i>Matrix spike control limits for Ca, Mg, and Na are not applicable due to high sample/spike ratio.</i>								
<b>SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)</b>								
Antimony	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 1:05	201132
Arsenic	NELAP	0.0010		0.0029	mg/L	5	12/20/2022 1:05	201132
Barium	NELAP	0.0010		0.0822	mg/L	5	12/20/2022 1:05	201132
Beryllium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 1:05	201132
Boron	NELAP	0.0250		0.0645	mg/L	5	12/23/2022 19:47	201132
Cadmium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 1:05	201132
Chromium	NELAP	0.0015		0.0025	mg/L	5	12/23/2022 19:47	201132
Cobalt	NELAP	0.0010	J	0.0009	mg/L	5	12/20/2022 1:05	201132
Lead	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 1:05	201132
Molybdenum	NELAP	0.0015	J	0.0014	mg/L	5	12/20/2022 1:05	201132
Selenium	NELAP	0.0010		< 0.0010	mg/L	5	12/20/2022 1:05	201132
Thallium	NELAP	0.0020		< 0.0020	mg/L	5	12/21/2022 21:38	201132
<b>SW-846 7470A (TOTAL)</b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	12/20/2022 15:14	201170



## Sample Summary

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

**Client:** Ramboll

**Work Order:** 22120976

**Client Project:** Baldwin Part 845

**Report Date:** 27-Dec-22

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
22120976-001	MW-358	Groundwater	2	12/13/2022 15:33
22120976-002	MW-394	Groundwater	2	12/14/2022 16:22
22120976-003	MW-194	Groundwater	2	12/14/2022 13:54
22120976-004	MW-306	Groundwater	2	12/14/2022 12:23
22120976-005	MW-370	Groundwater	2	12/14/2022 11:14
22120976-006	TPZ-164	Groundwater	2	12/14/2022 10:06
22120976-007	MW-304	Groundwater	2	12/14/2022 8:31
22120976-008	MW-203	Groundwater	2	12/14/2022 11:28
22120976-009	MW-393	Groundwater	2	12/14/2022 16:35
22120976-010	MW-193	Groundwater	2	12/14/2022 13:55



## Dates Report

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

Client: Ramboll

Work Order: 22120976

Client Project: Baldwin Part 845

Report Date: 27-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
22120976-001A	MW-358	12/13/2022 15:33	12/14/2022 20:12		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 12:40
	Standard Methods 2320 B 1997, 2011				12/16/2022 12:40
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 15:21
	SW-846 9036 (Total)				12/19/2022 20:47
	SW-846 9214 (Total)				12/15/2022 11:26
	SW-846 9251 (Total)				12/19/2022 20:52
22120976-001B	MW-358	12/13/2022 15:33	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:40	12/21/2022 1:17
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/19/2022 23:23
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/21/2022 20:15
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/23/2022 16:51
	SW-846 7470A (Total)			12/19/2022 10:10	12/20/2022 14:45
22120976-002A	MW-394	12/14/2022 16:22	12/14/2022 20:12		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 12:58
	Standard Methods 2320 B 1997, 2011				12/16/2022 12:58
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 15:22
	SW-846 9036 (Total)				12/19/2022 21:11
	SW-846 9214 (Total)				12/15/2022 11:28
	SW-846 9251 (Total)				12/19/2022 21:16
22120976-002B	MW-394	12/14/2022 16:22	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:40	12/21/2022 1:20
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/19/2022 23:29
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/21/2022 20:59
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/23/2022 17:35
	SW-846 7470A (Total)			12/19/2022 10:10	12/20/2022 14:47
22120976-003A	MW-194	12/14/2022 13:54	12/14/2022 20:12		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 13:06
	Standard Methods 2320 B 1997, 2011				12/16/2022 13:06
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 15:22
	SW-846 9036 (Total)				12/19/2022 21:32
	SW-846 9214 (Total)				12/15/2022 11:33
	SW-846 9251 (Total)				12/19/2022 21:22
22120976-003B	MW-194	12/14/2022 13:54	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:40	12/21/2022 1:24
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/19/2022 23:36
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/21/2022 21:05



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22120976

**Client Project:** Baldwin Part 845

**Report Date:** 27-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/23/2022 19:03
	SW-846 7470A (Total)			12/19/2022 10:10	12/20/2022 14:49
22120976-004A	MW-306	12/14/2022 12:23	12/14/2022 20:12		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 13:12
	Standard Methods 2320 B 1997, 2011				12/16/2022 13:12
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 15:22
	SW-846 9036 (Total)				12/19/2022 21:43
	SW-846 9214 (Total)				12/15/2022 11:35
	SW-846 9251 (Total)				12/19/2022 21:48
22120976-004B	MW-306	12/14/2022 12:23	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:40	12/21/2022 1:28
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/19/2022 23:42
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/21/2022 21:10
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/23/2022 19:09
	SW-846 7470A (Total)			12/19/2022 10:10	12/20/2022 14:56
22120976-005A	MW-370	12/14/2022 11:14	12/14/2022 20:12		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 13:20
	Standard Methods 2320 B 1997, 2011				12/16/2022 13:20
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 15:24
	SW-846 9036 (Total)				12/19/2022 22:07
	SW-846 9214 (Total)				12/15/2022 11:37
	SW-846 9251 (Total)				12/19/2022 22:12
22120976-005B	MW-370	12/14/2022 11:14	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:40	12/21/2022 1:31
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/19/2022 23:48
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/21/2022 21:16
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/23/2022 19:16
	SW-846 7470A (Total)			12/19/2022 10:10	12/20/2022 15:03
22120976-006A	TPZ-164	12/14/2022 10:06	12/14/2022 20:12		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 13:27
	Standard Methods 2320 B 1997, 2011				12/16/2022 13:27
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 15:24
	SW-846 9036 (Total)				12/19/2022 22:20
	SW-846 9214 (Total)				12/15/2022 11:39
	SW-846 9251 (Total)				12/19/2022 22:20
22120976-006B	TPZ-164	12/14/2022 10:06	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:40	12/21/2022 1:35



## Dates Report

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

**Client:** Ramboll

**Work Order:** 22120976

**Client Project:** Baldwin Part 845

**Report Date:** 27-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	<b>Test Name</b>				
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/19/2022 23:55
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/21/2022 21:21
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/23/2022 19:22
	SW-846 7470A (Total)			12/19/2022 10:10	12/20/2022 15:05
22120976-007A	MW-304	12/14/2022 8:31	12/14/2022 20:12		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 13:32
	Standard Methods 2320 B 1997, 2011				12/16/2022 13:32
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 15:25
	SW-846 9036 (Total)				12/19/2022 22:23
	SW-846 9214 (Total)				12/15/2022 11:41
	SW-846 9251 (Total)				12/19/2022 22:23
22120976-007B	MW-304	12/14/2022 8:31	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:40	12/21/2022 1:54
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/20/2022 0:01
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/21/2022 21:27
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/23/2022 19:28
	SW-846 7470A (Total)			12/19/2022 10:10	12/20/2022 15:07
22120976-008A	MW-203	12/14/2022 11:28	12/14/2022 20:12		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 13:41
	Standard Methods 2320 B 1997, 2011				12/16/2022 13:41
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 15:25
	SW-846 9036 (Total)				12/19/2022 22:36
	SW-846 9214 (Total)				12/15/2022 11:43
	SW-846 9251 (Total)				12/19/2022 22:36
22120976-008B	MW-203	12/14/2022 11:28	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:40	12/21/2022 1:57
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/20/2022 0:07
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/21/2022 21:32
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/23/2022 19:34
	SW-846 7470A (Total)			12/19/2022 10:10	12/20/2022 15:10
22120976-009A	MW-393	12/14/2022 16:35	12/14/2022 20:12		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 13:49
	Standard Methods 2320 B 1997, 2011				12/16/2022 13:49
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 15:25
	SW-846 9036 (Total)				12/19/2022 22:39
	SW-846 9214 (Total)				12/15/2022 11:45
	SW-846 9251 (Total)				12/19/2022 22:39





## Dates Report

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

**Client:** Ramboll

**Work Order:** 22120976

**Client Project:** Baldwin Part 845

**Report Date:** 27-Dec-22

Sample ID	Client Sample ID	Collection Date	Received Date		
	Test Name			Prep Date/Time	Analysis Date/Time
22120976-009B	MW-393	12/14/2022 16:35	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:40	12/21/2022 2:01
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/20/2022 0:39
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/21/2022 22:32
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/23/2022 19:41
	SW-846 7470A (Total)			12/19/2022 10:10	12/20/2022 15:12
22120976-010A	MW-193	12/14/2022 13:55	12/14/2022 20:12		
	Standard Methods 2320 B (Total) 1997, 2011				12/16/2022 13:57
	Standard Methods 2320 B 1997, 2011				12/16/2022 13:57
	Standard Methods 2540 C (Total) 1997, 2011				12/15/2022 15:31
	SW-846 9036 (Total)				12/19/2022 23:08
	SW-846 9214 (Total)				12/15/2022 11:47
	SW-846 9251 (Total)				12/19/2022 23:03
22120976-010B	MW-193	12/14/2022 13:55	12/14/2022 20:12		
	SW-846 3005A, 6010B, Metals by ICP (Total)			12/16/2022 15:40	12/21/2022 2:05
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/20/2022 1:05
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/21/2022 21:38
	SW-846 3005A, 6020A, Metals by ICPMS (Total)			12/16/2022 15:40	12/23/2022 19:47
	SW-846 7470A (Total)			12/19/2022 10:10	12/20/2022 15:14



## Quality Control Results

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

**Client:** Ramboll

**Work Order:** 22120976

**Client Project:** Baldwin Part 845

**Report Date:** 27-Dec-22

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

Batch R322496		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	12/16/2022
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	12/16/2022

Batch R322496		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		966	1000	0	96.6	90	110	12/16/2022
Total Dissolved Solids		20		928	1000	0	92.8	90	110	12/15/2022

Batch R322496		SampType: DUP		Units mg/L						
SampID: 22120976-002ADUP										
										RPD Limit: 5
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		1890				1948	3.02	12/15/2022

### SW-846 9036 (TOTAL)

Batch R322574		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	12/19/2022

Batch R322574		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	94.8	90	110	12/19/2022

Batch R322574		SampType: MS		Units mg/L						
SampID: 22120976-003AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		50		205	100.0	112.1	92.5	85	115	12/19/2022

Batch R322574		SampType: MSD		Units mg/L						
SampID: 22120976-003AMSD										
										RPD Limit: 10
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		50		210	100.0	112.1	97.8	204.6	2.54	12/19/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22120976

Client Project: Baldwin Part 845

Report Date: 27-Dec-22

### SW-846 9214 (TOTAL)

Batch R322419		SampType: MBLK		Units mg/L							
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		< 0.10	0.0370	0	0	-100	100	12/15/2022	

Batch R322419		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		1.03	1.000	0	102.5	90	110	12/15/2022	

Batch R322419		SampType: MS		Units mg/L							
SampID: 22120976-010AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.52	2.000	0.2730	112.6	75	125	12/15/2022	

Batch R322419		SampType: MSD		Units mg/L							
SampID: 22120976-010AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.46	2.000	0.2730	109.2	2.524	2.69	12/15/2022	

### SW-846 9251 (TOTAL)

Batch R322586		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	12/19/2022	

Batch R322586		SampType: LCS		Units mg/L							
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		20	20.00	0	100.6	90	110	12/19/2022	

Batch R322586		SampType: MS		Units mg/L							
SampID: 22120976-003AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		4		49	20.00	30.78	90.2	85	115	12/19/2022	



## Quality Control Results

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

**Client:** Ramboll

**Work Order:** 22120976

**Client Project:** Baldwin Part 845

**Report Date:** 27-Dec-22

### SW-846 9251 (TOTAL)

Batch R322586		SampType: MSD		Units mg/L				RPD Limit: 15			Date Analyzed
SampID: 22120976-003AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		4		<b>49</b>	20.00	30.78	89.0	48.81	0.45	12/19/2022	

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

Batch 201132		SampType: MBLK		Units mg/L						Date Analyzed
SampID: MBLK-201132										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		< <b>0.100</b>	0.0350	0	0	-100	100	12/21/2022
Lithium	*	0.0050		< <b>0.0050</b>	0.0021	0	0	-100	100	12/21/2022
Magnesium		0.0500		< <b>0.0500</b>	0.0055	0	0	-100	100	12/21/2022
Potassium		0.100		< <b>0.100</b>	0.0400	0	0	-100	100	12/21/2022
Sodium		0.0500		< <b>0.0500</b>	0.0180	0	0	-100	100	12/21/2022

### Batch 201132 SampType: LCS Units mg/L

SampID: LCS-201132										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100		<b>2.61</b>	2.500	0	104.2	85	115	12/21/2022
Lithium	*	0.0050		<b>0.565</b>	0.5000	0	112.9	85	115	12/21/2022
Magnesium		0.0500		<b>2.63</b>	2.500	0	105.2	85	115	12/21/2022
Potassium		0.100		<b>2.49</b>	2.500	0	99.5	85	115	12/21/2022
Sodium		0.0500		<b>2.34</b>	2.500	0	93.6	85	115	12/21/2022

### Batch 201132 SampType: MS Units mg/L

SampID: 22120976-010BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	<b>101</b>	2.500	96.48	184.8	75	125	12/21/2022
Lithium		0.0050		<b>0.568</b>	0.5000	0.005700	112.6	75	125	12/21/2022
Magnesium		0.0500	S	<b>38.3</b>	2.500	34.75	141.2	75	125	12/21/2022
Potassium		0.100		<b>3.45</b>	2.500	0.8879	102.4	75	125	12/21/2022
Sodium		0.0500	S	<b>81.1</b>	2.500	77.74	135.2	75	125	12/21/2022



## Quality Control Results

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

Client: Ramboll

Work Order: 22120976

Client Project: Baldwin Part 845

Report Date: 27-Dec-22

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

Batch 201132		SampType: MSD		Units mg/L				RPD Limit: 20			
SampID: 22120976-010BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Calcium		0.100	S	<b>101</b>	2.500	96.48	168.8	101.1	0.40	12/21/2022	
Lithium		0.0050		<b>0.563</b>	0.5000	0.005700	111.4	0.5685	1.04	12/21/2022	
Magnesium		0.0500		<b>37.8</b>	2.500	34.75	123.6	38.28	1.16	12/21/2022	
Potassium		0.100		<b>3.46</b>	2.500	0.8879	102.8	3.449	0.29	12/21/2022	
Sodium		0.0500		<b>80.3</b>	2.500	77.74	103.2	81.12	0.99	12/21/2022	

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

Batch 201132		SampType: MBLK		Units mg/L						Date Analyzed
SampID: MBLK-201132										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	12/19/2022
Arsenic		0.0010		< <b>0.0010</b>	0.0004	0	0	-100	100	12/19/2022
Barium		0.0010		< <b>0.0010</b>	0.0007	0	0	-100	100	12/19/2022
Beryllium		0.0010		< <b>0.0010</b>	0.0002	0	0	-100	100	12/19/2022
Cadmium		0.0010		< <b>0.0010</b>	0.0001	0	0	-100	100	12/19/2022
Chromium		0.0015		< <b>0.0015</b>	0.0007	0	0	-100	100	12/21/2022
Lead		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	12/19/2022
Molybdenum		0.0015		< <b>0.0015</b>	0.0006	0	0	-100	100	12/19/2022
Selenium		0.0010		< <b>0.0010</b>	0.0006	0	0	-100	100	12/19/2022
Thallium		0.0020		< <b>0.0020</b>	0.0010	0	0	-100	100	12/21/2022

### Batch 201132 SampType: LCS Units mg/L

SampID: LCS-201132											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		<b>0.511</b>	0.5000	0	102.3	80	120	12/19/2022	
Arsenic		0.0010		<b>0.556</b>	0.5000	0	111.3	80	120	12/19/2022	
Barium		0.0010		<b>2.06</b>	2.000	0	102.8	80	120	12/19/2022	
Beryllium		0.0010		<b>0.0509</b>	0.0500	0	101.9	80	120	12/19/2022	
Cadmium		0.0010		<b>0.0499</b>	0.0500	0	99.8	80	120	12/19/2022	
Chromium		0.0015		<b>0.212</b>	0.2000	0	106.0	80	120	12/19/2022	
Cobalt		0.0010		<b>0.548</b>	0.5000	0	109.6	80	120	12/19/2022	
Lead		0.0010		<b>0.524</b>	0.5000	0	104.7	80	120	12/19/2022	
Molybdenum		0.0015		<b>0.524</b>	0.5000	0	104.8	80	120	12/19/2022	
Selenium		0.0010		<b>0.517</b>	0.5000	0	103.4	80	120	12/19/2022	
Thallium		0.0020		<b>0.294</b>	0.2500	0	117.5	80	120	12/21/2022	



## Quality Control Results

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

Client: Ramboll

Work Order: 22120976

Client Project: Baldwin Part 845

Report Date: 27-Dec-22

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

Batch 201132		SampType: MS		Units mg/L							Date Analyzed
SampID: 22120976-010BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Antimony		0.0010		<b>0.503</b>	0.5000	0	100.5	75	125	12/20/2022	
Arsenic		0.0010		<b>0.536</b>	0.5000	0.002870	106.7	75	125	12/20/2022	
Barium		0.0010		<b>2.06</b>	2.000	0.08225	98.7	75	125	12/20/2022	
Beryllium		0.0010		<b>0.0496</b>	0.0500	0	99.1	75	125	12/20/2022	
Boron		0.0250		<b>0.670</b>	0.5000	0.06451	121.2	75	125	12/23/2022	
Cadmium		0.0010		<b>0.0472</b>	0.0500	0	94.4	75	125	12/20/2022	
Chromium		0.0015		<b>0.230</b>	0.2000	0.002464	113.8	75	125	12/23/2022	
Cobalt		0.0010		<b>0.501</b>	0.5000	0.0008526	100.1	75	125	12/20/2022	
Lead		0.0010		<b>0.508</b>	0.5000	0	101.6	75	125	12/20/2022	
Molybdenum		0.0015		<b>0.501</b>	0.5000	0.001446	100.0	75	125	12/20/2022	
Selenium		0.0010		<b>0.485</b>	0.5000	0	97.1	75	125	12/20/2022	
Thallium		0.0020		<b>0.301</b>	0.2500	0	120.2	75	125	12/21/2022	

Batch 201132		SampType: MSD		Units mg/L							RPD Limit: 20	Date Analyzed
SampID: 22120976-010BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Antimony		0.0010		<b>0.546</b>	0.5000	0	109.2	0.5025	8.27	12/20/2022		
Arsenic		0.0010		<b>0.549</b>	0.5000	0.002870	109.2	0.5365	2.25	12/20/2022		
Barium		0.0010		<b>2.11</b>	2.000	0.08225	101.3	2.056	2.52	12/20/2022		
Beryllium		0.0010		<b>0.0525</b>	0.0500	0	105.0	0.04956	5.74	12/20/2022		
Boron		0.0250		<b>0.681</b>	0.5000	0.06451	123.2	0.6704	1.52	12/23/2022		
Cadmium		0.0010		<b>0.0502</b>	0.0500	0	100.3	0.04719	6.12	12/20/2022		
Chromium		0.0015		<b>0.235</b>	0.2000	0.002464	116.5	0.2300	2.31	12/23/2022		
Cobalt		0.0010		<b>0.503</b>	0.5000	0.0008526	100.4	0.5013	0.35	12/20/2022		
Lead		0.0010		<b>0.508</b>	0.5000	0	101.7	0.5079	0.12	12/20/2022		
Molybdenum		0.0015		<b>0.516</b>	0.5000	0.001446	102.8	0.5014	2.80	12/20/2022		
Selenium		0.0010		<b>0.475</b>	0.5000	0	95.1	0.4854	2.08	12/20/2022		
Thallium		0.0020		<b>0.298</b>	0.2500	0	119.3	0.3005	0.72	12/21/2022		

### SW-846 7470A (TOTAL)

Batch 201170		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-201170											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Mercury		0.00020		<b>&lt; 0.00020</b>	0.0001	0	0	-100	100	12/21/2022	



## Quality Control Results

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

**Client:** Ramboll

**Work Order:** 22120976

**Client Project:** Baldwin Part 845

**Report Date:** 27-Dec-22

**SW-846 7470A (TOTAL)**

Batch 201170		SampType: LCS		Units mg/L						
SampID: LCS-201170										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		<b>0.00513</b>	0.0050	0	102.6	85	115	12/20/2022

Batch 201170		SampType: MS		Units mg/L						
SampID: 22120976-004BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		<b>0.00495</b>	0.0050	0	99.0	75	125	12/20/2022

Batch 201170		SampType: MSD		Units mg/L						
SampID: 22120976-004BMSD										
										RPD Limit: 15
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		<b>0.00496</b>	0.0050	0	99.2	0.004949	0.22	12/20/2022



# Receiving Check List

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

Client: Ramboll

Work Order: 22120976

Client Project: Baldwin Part 845

Report Date: 27-Dec-22

Carrier: Employee

Received By: SW

Completed by:

Reviewed by:

On:

On:

15-Dec-22

15-Dec-22

Lindsey Maddox

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

- |   |   |   |  |                                  |
|---|---|---|--|----------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             | Not Present <input type="checkbox"/>   | Temp °C <b>4.8</b>               |
| Type of thermal preservation?                           | None <input type="checkbox"/>           | Ice <input checked="" type="checkbox"/> | Blue Ice <input type="checkbox"/>      | Dry Ice <input type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |
| Reported field parameters measured:                     | Field <input type="checkbox"/>          | Lab <input type="checkbox"/>            | NA <input checked="" type="checkbox"/> |                                  |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>             |  |                                  |

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

- |   |   |                             |   |
|---|---|-----------------------------|---|
| Water – at least one vial per sample has zero headspace?  | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | No VOA vials <input checked="" type="checkbox"/>      |
| Water - TOX containers have zero headspace?               | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | No TOX containers <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt?                       | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/>                           |
| NPDES/CWA TCN interferences checked/treated in the field? | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/>                |

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

pH strip #83856. - BNB/lmaddox - 12/15/2022 9:41:23 AM



# CHAIN OF CUSTODY

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

**Client:** Ramboll  
**Address:** 234 W. Florida Street  
**City / State / Zip:** Milwaukee, WI 53204  
**Contact:** Eric Bauer **Phone:** (920) 255-4997  
**E-Mail:** eric.bauer@ramboll.com **Fax:** \_\_\_\_\_

**Samples on:**  ICE  BLUE ICE  NO ICE 4.8 °C **LTG#** 3  
**Preserved in:**  LAB  FIELD **FOR LAB USE ONLY**  
**Lab Notes:** PH 8.88 SLU BUD

Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No  
 Are these samples known to be hazardous?  Yes  No  
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section.  Yes  No

**Client Comments:**  
 Metals: Sb As Ba Be B Cd Ca Cr Co Pb Li Mg Hg Mo K Se Na Tl (ICP, ICP/MS, CVAA)  
 BAL-22Q4-845-601-R3

**Project Name/Number:** Baldwin Part 845  
**Sample Collector's Name:** SAMMY MALLOW

**Results Requested:**  Standard  1-2 Day (100% Surcharge)  
 Other  3 Day (50% Surcharge)  
**Billing Instructions:** \_\_\_\_\_  
**# and Type of Containers:**

**MATRIX** **INDICATE ANALYSIS REQUESTED**

Lab Use Only	Sample Identification	Date/Time Sampled	UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER
22120976-001	MW-358	12/13/22 1533	1	1						
-002	MW-394	12/14/22 1622								
-003	MW-194	12/14/22 1354								
-004	MW-306	12/14/22 1223								
-005	MW-370	12/14/22 1114								
-006	TPZ-164	12/14/22 1006								
-007	MW-304	12/14/22 0831								
-008	MW-203	12/14/22 1128								
-009	MW-393	12/14/22 1635								
-010	MW-193	12/14/22 1355								

Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	ALK B / ALK C	Cl SO4	F- TDS	Fe226/228 (SUB)	Total Metals
					X	X	X	X	X	Sm 12-14-22

**Relinquished By:** *Clayton Green* **Date/Time:** 12/14/22 20:12

**Received By:** *[Signature]* **Date/Time:** 12/14/22 20:12

Prepared for  
**VISTRA**

Date  
**December 2022**

Project No.  
**1940102653**

# **FIELD NOTEBOOK**

## **BALDWIN POWER PLANT**

## ACTIVITY SUMMARY REPORT

# Activity Summary Report

Date(s): 12-12-22, 12-13-22, 12-14-22 Page 1 of 2

Project:	Baldwin Power Plant	Location:	BALDWIN POWER PLANT
Project #:	1940102653	Personnel:	S. MALKIN, A. TABARES, A. MARGUSON
Task #:	1000		

Date	Arrival Time	Departure Time	Temperature am / pm	Cloud Cover am / pm	Wind Conditions Am / pm
12-12-22	0825	1700	NA	CLEAR/CLEAR	CALM/CALM
12-13-22	0700	1800	30s / 50s	OVERCAST/OVERCAST	WINDY/WINDY
12-14-22	0712	1918	40s / 80s	CLEAR & RAIN	WINDY/WINDY

**Summary of Field Notes/Sheets Recorded:**

- Sample Control Log(s) \_\_\_\_\_
- Well Condition Form(s) \_\_\_\_\_
- Water Level and Field Parameters Field Form(s) \_\_\_\_\_
- Well Development and Groundwater Sampling Field Form(s) \_\_\_\_\_
- Chain-of-Custody(s) \_\_\_\_\_
- Equipment Rental Information \_\_\_\_\_
- Other: \_\_\_\_\_

ON 12-13-22 ADAPTION # 12824 HAD ISSUES WITH WORKING SPECIFIC CONDUCTIVITY SENSOR. REPAIR COMPANY SHIPPED A REPLACEMENT TO ARRIVE NEXT MORNING.

**Contractor Summary:**

NOT APPLICABLE

**Summary of Equipment On-Site:**

3x DEPTH TO WATER METERS, 3x AQUATRULLS, 3 PERI PUMPS,  
3x TURBIDITY METERS, 3x BLADDER PUMPS, TUBING,  
3x COMPRESSORS, 3x 12V BATTERIES

**Site Visitor Summary:**

NOT APPLICABLE

# Activity Summary Report

Date(s):  
Project Number:

12-12-22, 12-13-22, 12-14-22  
1940102653

Page 2 of 2

## Summary of Work (include sample locations, types, media, etc...)

12-12-22 GAUGED WELL NETWORK AND COLLECTED  
SAMPLES FROM XPW04, XPW05, XPW02  
12-13-22 COLLECTED SAMPLES FROM MW-258, MW-158R,  
MW-358, MW-204, MW-392, XPW06, XPW01, MW-192,  
MW-356. MW-203 WAS DEVELOPED, 15 GALLONS REMOVED.  
12-14-22 COLLECTED SAMPLES FROM MW-307, MW-193,  
MW-393, MW-203, MW-304, TPZ-164, MW-370,  
MW-306, MW-194, MW-394

## Issues/ Resolution:

ON 12-13-22 AQUATROLL SERIAL # 454859 HAD ISSUES  
W/ A MALFUNCTIONING SPECIFIC CONDUCTIVITY SENSOR. RENTAL  
COMPANY SHIPPED A REPLACEMENT TO ARRIVE NEXT MORNING  
VIA FEDEX. FEDEX DELAYED DELIVERY AND THE AQUATROLL  
WAS NOT DELIVERED UNTIL 12/15/2022.

## IDW:

NOT APPLICABLE

## Additional Comments:

Field Representative:  
Date:

S MALLOW  
12-15-2022

Signature:

**SAMPLE CONTROL LOG**

Confidential

# Sample Control Log

Analytical Laboratory: TEK LAB  
 Geotechnical Laboratory: NOT APPLICABLE  
 Field Staff ID(s): S MALLOW, A MARGUSON, A TABARES

Project Name: BALDWIN  
 Project ID: 1940102653  
 Task ID: 1000

(BTOC)  
 Notes (turnaround time, handling notes)  
1940102653-2022-1213-001  
1940102653-2022-1213-002  
3

Month (2-digit)	Date (2-digit)	Year (2-digit)	Sample Number (3-digit)	Unique Sample ID	Sample Media	Sample Location	Sample Depth (feet)	QC Sample Information (duplicate, blank, etc...)	COC Number	Notes (turnaround time, handling notes)
12	13	22	N/A	XPW01	GW	XPW01	9.5'	—	1940102653-2022-1213-001	
12	13	22		DUP-02	GW	XPW01	9.5'	DUPLICATE	1940102653-2022-1213-002	
12	13	22		XPW06		XPW06	8'	—		
12	13	22		MW-356		MW-356	65'	—		
12	12	22		XPW04		XPW04	16'	—		
12	12	22		DUP-01		XPW04	16'	DUPLICATE		
12	12	22		XPW05		XPW05	26.95'	MS/MSD		
12	12	22		XPW02		XPW02	11'	—		
12	13	22		MW-358		MW-358	87'	—	1940102653-2022-1214-001	
12	14	22		MW-394		MW-394	78'	—		—603
12	14	22		MW-194		MW-194	28'	—		
12	14	22		MW-306		MW-306	85'	—		
12	14	22		MW-370		MW-370	58'	—		
12	14	22		TPZ-164		TPZ-164	7.5'	—		
12	14	22		MW-304		MW-304	55'	—		

# Sample Control Log

Project Name: BALDWIN

Analytical Laboratory: \_\_\_\_\_

Geotechnical Laboratory: \_\_\_\_\_

Project ID: \_\_\_\_\_

Task ID: \_\_\_\_\_

Field Staff ID(s): \_\_\_\_\_

					Sample Media	Sample Location	Sample Depth (feet)	QC Sample Information (duplicate, blank, etc...)	COC Number	Notes (turnaround time, handling notes)
12	14	22	NA	MW-203	GW	MW-203	27'	---	1940102653-2022	12/14-007
12	14	22		MW-393		MW-393	75'	---		-003
12	14	22		MW-193		MW-193	40'	---		
12	14	22		MW-307		MW-307	67'	---	1940102653-2022	12/14-002
12	13	22		MW-204		MW-204	70'	---		-604
12	13	22		MW-158R		MW-158R	18'	---		
12	13	22		MW-258		MW-258	47'	---		
12	13	22		MW-392		MW-392	82'	---		
12	13	22		MW-192		MW-192	27.5'	---		
12	12	22		EB-01		---	---	EQUIPMENT	BANK 1940102653-2022	12/14-005
12	13	22		EB-02		---	---			
12	13	22		EB-03		---	---			
12	14	22		EB-04		---	---			
12	14	22		EB-05		---	---			
12	14	22		EB-06		---	---			





**WELL CONDITION FIELD FORMS**

# WELL CONDITION FIELD FORM

Site : Baldwin Power Plant

Project #: 194010Z653

Task #: 1000

Date : 12-12-12

Samplers : S MALGOW  
A TARGARES  
A MARGOWSON

Location	EVERY SAMPLING EVENT										AT LEAST ONCE A YEAR		
	Surface Seal	Lid	Gasket	Lock	Cap	Protection (bumper posts, 17947/22)	Bailer	Pump	Well Casing	Depth to Water (feet)	Expected Well Depth (feet)	Field Measured Well Depth (feet)	NAPL Thickness (feet)
MW-369	G	G	G	G	G	SM	NA	G	G				
PZ-16A	G	G	NA	G	G	G	NA	NA	G				
MW-370	G	G	G	G	G	G	N/A	G	G				
PZ-170	G	G	N/A	G	G	G	N/A	N/A	G				
MW-382	G	G	G	G	G	G	N/A	G	G				
PZ-162	G	G	N/A	G	G	G	N/A	N/A	G				
OW-251	G	G	N/A	G	G	G	N/A	N/A	G	SM			
OW-157	G	G	N/A	G	G	G	N/A	N/A	G	12/12/22			
MW-370	G	G	G	G	G	G	NA	G	AT 12/12/22				
MW-384	G	G	G	G	G	G	N/A	G	G				
MW-382	G	G	G	G	G	G	N/A	G	G				
MW-1568	G	G	NA	G	G	G	N/A	N/A	G				
MW-256	G	G	N/A	G	G	G	N/A	N/A	G				
MW-356	G	G	N/A	G	G	G	N/A	N/A	G				

P : Poor - Potential or Evident Sample Integrity Issues (additional comments required, picture(s) desirable)  
 F : Fair - Future Sample Integrity May Be Compromised If Well Repair/Upgrade is Not Undertaken (additional comments required, picture(s) desirable)  
 G : Good (additional comments not required)  
 n/a : Not Applicable



# WELL CONDITION FIELD FORM

Date: 12-12-22  
 Samplers: S MALLOW  
A TABARES  
A MARGUSON

Site: Baldwin Power Plant  
 Project #: 1940107653  
 Task #: 1800

Location	EVERY SAMPLING EVENT										AT LEAST ONCE A YEAR		
	Surface Seal	Lid	Gasket	Lock	Cap	Protection (bumper posts, etc.)	Bailer	Pump	Well Casing	Depth to Water (feet)	Expected Well Depth (feet)	Field Measured Well Depth (feet)	NAPL Thickness (feet)
MW-304	G	G	G	G	G	G	N/A	G	G				
MW-104DR	G	G	G	G	G	G	N/A	G	G				SM
MW104S	G	G	G	G	G	G	N/A	G	G				12/12/22
MW-306	G	G	G	G	G	G	N/A	G	G				
MW-204	G	G	G	F	G	G	N/A	G	G				
XPW04	G	G	G	G	G	↓	NA	G	G				
MW-307	G	G	G	G	G	↓	NA	G	G				
XPW01	G	G	G	G	G	G	NA	G	G				
XPW02	G	G	G	G	G	↓	NA	G	G				
XPW05	G	G	G	G	G	G	NA	G	G				
XPW06	G	G	G	G	G	NA	NA	G	G				
MW-104ER	G	G	G	G	G	G	NA	G	G				
MW-104SR	G	G	G	G	G	G	NA	G	G				
MW-356	G	G	G	G	G	NA	NA	G	G				

AIR CONNECTOR DOES NOT WORKS, HAVE TO CONNECT DIRECTLY TO TUBING

P : Poor - Potential or Evident Sample Integrity Issues (additional comments required, picture(s) desirable)  
 F : Fair - Future Sample Integrity May Be Compromised if Well Repair/Upgrade is Not Undertaken (additional comments required, picture(s) desirable)  
 G : Good (additional comments not required)  
 n/a : Not Applicable



# WELL CONDITION FIELD FORM

Site : Baldwin Power Plant      Date : \_\_\_\_\_  
 Project # : \_\_\_\_\_      Samplers : \_\_\_\_\_  
 Task # : \_\_\_\_\_

Location	EVERY SAMPLING EVENT										AT LEAST ONCE A YEAR		
	Surface Seal	Lid	Gasket	Lock	Cap	Protection (bumper posts, etc.)	Bailer	Pump	Well Casing	Expected Well Depth (feet)	Field Measured Well Depth (feet)	Well Base Sediment Thickness (feet)	
MN-256	G	G	G	G	G	NA	NA	G	G				
MN-156	G	G	G	G	G	NA	NA	G	G				
MN-394	G	G	G	G	G	G	NA	G	G				
MN-174	G	G	G	G	G	G	NA	G	G				
MN-393	G	G	G	G	G	G	NA	G	G				
MN-193	G	G	G	G	G	G	NA	G	G	SM			
MN-392	G	G	G	G	G	G	NA	G	G	12/12/22			
TPZ-164	G	G	G	G	G	NA	NA	G	G				
MN-202	G	G	G	G	G	NA	NA	G	G				
MN-113	G	G	G	F	G	NA	NA	G	G	REPLACE LOCK			
MN-192	G	G	G	G	G	G	NA	G	G				
						SM	12/12/22						

P : Poor - Potential or Evident Sample Integrity Issues (additional comments required, picture(s) desirable)  
 F : Fair - Future Sample Integrity May Be Compromised if Well Repair/Upgrade is Not Undertaken (additional comments required, picture(s) desirable)  
 G : Good (additional comments not required)  
 n/a : Not Applicable



# WATER LEVEL AND FIELD PARAMETERS FIELD FORM

Water Level Indicator Serial #: 3520-1001  
 Purge Device and Serial #: 362706, SM 12/14/22 | 070-1009  
 Quality Probe Type and Serial #: AQUATROLS: 454820, 449093, 454859  
 Calibration Check: AQUATROLS FULLY CALIBRATED  
DAILY

General Information  
 Site: BALBWIN  
 Project #: 1940102653  
 Task #: 1000.LBR  
 Date: 12-12-22  
 Samplers: S. MALLOW, A. TABARES, A. MAKGUSON

Location	Time (military)	Depth to Water (feet below TOC)	Product Top Depth (feet below TOC)	Product Bottom Depth (feet below TOC)	Product Notes	Time (military)	pH (su)	Conductivity (µs/cm)	Temperature (°C)	Oxidation/Reduction Potential (ORP) (mV)	Turbidity (NTU)	Dissolved Oxygen (DO) (mg/L)	Field Comments:
XTPN04	1143	8.06											
MW-307	0956	7.07											
XTPN01	1131	10.68											
XTPN02	1155	4.45											
XTPN03													
XTPN05	1256	4.89											
XTPN06	1506	2.70											
MW-390	1320	8.70											
<del>XTPN06</del>													
MW-1040R	1520	14.32											
MW-145R	1523	14.35											
MW-369	1238	12.47											
PZ-169	1241	13.45											
MW-370	1245	18.68											

SM 12-12-22

DATA IN JUSTIFIED

casing ground bed from  
 DED. bladder  
 DED. bladder  
 DED. bladder  
 DED. bladder

DED. DEDICATED

n/a : Not Applicable    nm : Not Measured    TOC: Top of Well Casing

# WATER LEVEL AND FIELD PARAMETERS FIELD FORM

**General Information**

Water Level Indicator Serial #: \_\_\_\_\_

Purge Device and Serial #: \_\_\_\_\_

Quality Probe Type and Serial #: \_\_\_\_\_

Calibration Check: \_\_\_\_\_

Site: \_\_\_\_\_

Project #: \_\_\_\_\_

Task #: \_\_\_\_\_

Date: \_\_\_\_\_

Samplers: \_\_\_\_\_

Location	Time (military)	Depth to Water (feet below TOC)	Product Top Depth (feet below TOC)	Product Bottom Depth (feet below TOC)	Product Notes	Time (military)	pH (su)	Conductivity (us/cm)	Temperature (°C)	Oxidation/Reduction Potential (ORP) (mV)	Turbidity (NTU)	Dissolved Oxygen (DO) (mg/L)	Field Comments:
PZ-170	1330	16.61											
MN-382	1250	16.72											DED. bladder
PZ-182	1253	18.30											
OW-257	1341	6.19											DED. tubing
OW-157	1358	DRY											DTB 5.90
MN-384	1402	14.44											DED. bladder
MN-383	1417	18.86											DED. bladder UNABLE TO COLLECT REPAIRING, OBSTRUCTION
TPZ-159	---	---											
MN-356	1223	4.42											DED. bladder
OW-256	1215	10.52											
OW-166	1218	8.16											
MN-204	1530	12.04											DED. bladder Replace lock
MN-203													
MN-394	1526	5.11											

na : Not Applicable    nm : Not Measured    TOC: Top of Well Casing

RAMBOLL

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Attachment 5

# WATER LEVEL AND FIELD PARAMETERS FIELD FORM

**General Information**

Site : \_\_\_\_\_  
 Project # : \_\_\_\_\_  
 Task # : \_\_\_\_\_  
 Date : \_\_\_\_\_  
 Samplers : \_\_\_\_\_  
 Water Level Indicator Serial # : \_\_\_\_\_  
 Purge Device and Serial # : \_\_\_\_\_  
 Quality Probe Type and Serial # : \_\_\_\_\_  
 Calibration Check : \_\_\_\_\_

Location	Time (military)	Depth to Water (feet below TOC)	Product Top Depth (feet below TOC)	Product Bottom Depth (feet below TOC)	Product Notes	Time (military)	pH (su)	Conductivity (µs/cm)	Temperature (°C)	Oxidation/Reduction Potential (ORP) (mV)	Turbidity (NTU)	Dissolved Oxygen (DO) (mg/L)	Field Comments:
MN-270													
MN-356													
MN-306	1450	17.77											DED-bladder
MN-304	1526	10.12											DED-bladder
MN-194	1524	6.81											
MN-393	1521	8.34											
MN-193	1520	8.99											
MN-392	1518	8.61											
MN-358	1345	69.35											
MN-268	1332	14.07											
MN-158R	1328	13.92											
TPZ-164	1121	3.95											
X-0005		11.89											
X-0008													
MN-203	1606	20.69											
MN-113	1620	11.28											
MN-192	1515	8.33											

12-12-22 SM

12-12-22 SM

DATA IN  
JUST IN

DEPTH TO PUMP 69.85  
 REFERENCE LOCK DEPTH TO PUMP 1834

TOC: Top of Well Casing

mm: Not Measured

RAMBOLL | Bright ideas. Sustainable change.



**WELL DEVELOPMENT AND GROUNDWATER SAMPLING  
FIELD FORM**

Confidential



**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

**PROJECT INFORMATION**

Site: RAMBOLL Task #: 1000 Client: WEST Start Date: 12-14-22 Time: 0929  
 Project Number: 19410853 Finish Date: 12-14-22 Time: 1005  
 Field Personnel: ADD/SR

**WELL INFORMATION**

Well ID: RZ-16c1  Well Development  
 Casing ID: 2 Inches  Low-Flow / Low-Stress Sampling  
 Screen Interval: NA  Well Volume Approach Sampling  
 Borehole Diameter: Unknown Inches  Other (Specify below)  
 Filter Pack Interval: Unknown

**EVENT TYPE**

**PURGE INFORMATION**

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: Alexis Kristatic (739374)  
 Tube/Pump Intake Depth: 28.5'  
 Stabilized Pumping Rate: 250 ml/min

**DEPTH MEASUREMENTS**

**VOLUME CALCULATION AND PRODUCTION INFORMATION**

	INITIAL		FINAL	
	Depth (FT BTOC)	Time (24-Hour)	Depth (FT BTOC)	Time (24-Hour)
LNAPL				
Groundwater	3.88'	0929	3.90'	1005
DNAPL				
Casing Base				
Water Level Serial #:	<u>514107</u>			

**WATER QUALITY INDICATOR PARAMETERS**

Sampling Stage	Time (millian)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Initial	0929	0	3.88	—	13.50	7.25	978.37	2.72	601.38	-117.5	Clear
purge	0935	1	3.9		13.19	7.33	978.00	0.58	242.77	-135.1	
	0938	1	3.9								
	0941	1	3.9								
	0943	1	3.9								
	0945	1	3.9								
	0948	1	3.9								
	0951	1	3.9								

**NOTES**

**ABBREVIATIONS**

Initial/Potentiometric WL: 3.88 Date: 12-14-22 Time: 0929  
 TD: 9.77 Pump speed: 20 Sample @ 100L

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION											
Site: <u>BALDWIN RP</u>				Client: <u>VISTEK</u>							
Project Number: <u>174018753</u>			Task #: <u>1000</u>			Start Date: <u>12-14-22</u>			Time: <u>0929</u>		
Field Personnel: <u>AA/LSR</u>				Finish Date: <u>12-14-22</u>				Time: <u>1006</u>			
WELL INFORMATION			EVENT TYPE			PURGE INFORMATION					
Well ID: <u>TRZ-1601</u>			<input type="checkbox"/> Well Development			Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump TO: <u>9.77</u>					
Casing ID: <u>2</u> inches			<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling			Bailer Type: <u>n/a</u>					
Screen Interval: <u>NA</u>			<input type="checkbox"/> Well Volume Approach Sampling			Pump Type and Serial #: <u>Alexis Peristaltic (739374)</u>					
Borehole Diameter: <u>Unknown</u> inches			<input type="checkbox"/> Other (Specify below)			Tube/Pump Intake Depth: <u>28.5'</u>					
Filter Pack Interval: <u>Unknown</u>						Stabilized Pumping Rate: <u>250 ml/min</u>					
DEPTH MEASUREMENTS					VOLUME CALCULATION AND PRODUCTION INFORMATION						
INITIAL		FINAL			Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole						
Depth	Time	Depth	Time	Volume Per Foot:	<del>Standing Water Column: <u>NA</u> feet</del>						
FT BTOC	(24-Hour)	FT BTOC	(24-Hour)		<del>1 Well Volume: _____ Gallons 3 Well Volumes: _____ Gallons</del>						
LNAPL					<del>5 Well Volumes: _____ Gallons 10 Well Volumes: _____ Gallons</del>						
Groundwater	<u>3.88'</u>	<u>0929</u>	<u>3.90</u>	<u>1006</u>	<del>Total Volumes Produced: _____ Gallons</del>						
DNAPL					<del>Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No</del>						
Casing Base											
Water Level Serial #: <u>515107</u>				Water Quality Probe Type and Serial #: <u>Aqualat 600 #454820</u>							
WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (us/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>0929</u>	<u>0</u>	<u>3.88</u>	<u>-</u>	<u>13.50</u>	<u>7.25</u>	<u>978.37</u>	<u>2.72</u>	<u>601.38</u>	<u>-117.5</u>	<u>Clear</u>
purge	<u>0935</u>		<u>3.9</u>		<u>13.19</u>	<u>7.33</u>	<u>979.00</u>	<u>0.68</u>	<u>292.77</u>	<u>-135.1</u>	
<u>0900</u>	<u>0938</u>	<u>0938</u>	<u>3.9</u>								
<u>09100</u>	<u>0938</u>	<u>0941</u>	<u>3.9</u>								
<u>1200</u>	<u>0941</u>	<u>0943</u>	<u>3.9</u>								
<u>1500</u>	<u>0943</u>	<u>0945</u>									
<u>1800</u>	<u>0945</u>	<u>0948</u>									
<u>2100</u>	<u>0948</u>	<u>0951</u>									
<u>2400</u>											
NOTES								ABBREVIATIONS			
Initial/Potentiometric WL: <u>3.88</u> Date: <u>12-14-22</u> Time: <u>0929</u>								Cond - Actual Conductivity			
<u>TD: 9.77</u> Pump speed: <u>20</u> Sample @ <u>100C</u>								FT BTOC - Feet Below Top of Casing			
								na - Not Applicable			
								nm - Not Measured			
								ORP - Oxidation-Reduction Potential			
								SEC - Specific Electrical Conductance			
								SU - Standard Units			
								Temp - Temperature			
								°C - Degrees Celsius			

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

**PROJECT INFORMATION**

Site: RAIDWIN OP Client: VISTA  
 Project Number: 1940102653 Task #: 1000 Start Date: 12-14-22 Time: 0816  
 Field Personnel: ABNISM Finish Date: 12-14-22 Time: 0831

**WELL INFORMATION**

Well ID: M10-304  Well Development  
 Casing ID: 2  Low-Flow / Low-Stress Sampling  
 Screen Interval: ~45.0-55.0  Well Volume Approach Sampling  
 Borehole Diameter: Unknown  Other (Specify below)  
 Filter Pack Interval: Unknown

**PURGE INFORMATION**

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: QEG Wierwage (1076-1004)  
 Tube/Pump Intake Depth: ~50.0'  
 Stabilized Pumping Rate: 250 mL/min

**DEPTH MEASUREMENTS**

	INITIAL		FINAL	
	Depth (FT BTOC)	Time (24-Hour)	Depth (FT BTOC)	Time (24-Hour)
LNAPL				
Groundwater	<u>10.10</u>	<u>0816</u>	<u>13.43</u>	<u>0831</u>
DNAPL				
Casing Base				

**VOLUME CALCULATION AND PRODUCTION INFORMATION**

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: N/A  
 Standing Water Column: N/A feet  
 1 Well Volume: 3 Well Volumes: 10 Well Volumes: Gallons  
 5 Well Volumes: 10 Well Volumes: Gallons  
 Total Volumes Produced: 10 Well Volumes: Gallons  
 Well Purged Dry?  Yes  No

**WATER QUALITY INDICATOR PARAMETERS**

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp (°C)	pH (SU)	SEC or Cond. (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity	NOTES	
												Initial	Purge
Initial	<u>0816</u>	<u>0</u>	<u>10.10</u>	<u>—</u>	<u>15.03</u>	<u>7.82</u>	<u>2831.2</u>	<u>4.81</u>	<u>7.89</u>	<u>175.3</u>	<u>Clear</u>		
Purge	<u>0822</u>	<u>1</u>	<u>11.93</u>	<u>1</u>	<u>12.58</u>	<u>7.83</u>	<u>2887.3</u>	<u>0.48</u>	<u>0.01</u>	<u>146.1</u>			
	<u>0825</u>	<u>1</u>	<u>13.03</u>	<u>1</u>	<u>13.03</u>	<u>7.87</u>	<u>2825.7</u>	<u>0.22</u>	<u>4.07</u>	<u>1408</u>			
	<u>0828</u>	<u>1</u>	<u>13.43</u>	<u>3.33</u>	<u>15.11</u>	<u>7.82</u>	<u>2825.7</u>	<u>0.22</u>	<u>4.07</u>	<u>1408</u>			
STABLE	<u>0831</u>	<u>0.60</u>	<u>13.43</u>	<u>3.33</u>	<u>15.11</u>	<u>7.82</u>	<u>2825.7</u>	<u>0.22</u>	<u>4.07</u>	<u>1408</u>			

**NOTES**

Initial/Potentiometric WL: 10.10 Date: 12-14-22 Time: 0816  
 Sample time @ 0831 on 12/14/22

**ABBREVIATIONS**

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 ORP - Oxidation-Reduction Potential  
 SU - Standard Units  
 Temp. - Temperature  
 °C - Degrees Celsius

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION											
Site: <u>BALDWIN PP</u>				Client: <u>VISTRA</u>							
Project Number: <u>194010283</u>			Task #: <u>1000</u>		Start Date: <u>12-13-22</u>			Time: <u>1517</u>			
Field Personnel: <u>RAM/SM</u>					Finish Date: <u>12-13-22</u>			Time: <u>1607</u>			
WELL INFORMATION				EVENT TYPE				PURGE INFORMATION			
Well ID: <u>MW-322</u>				<input type="checkbox"/> Well Development				Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump <u>TD=88.5</u>			
Casing ID: <u>2791</u> inches				<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling				Bailer Type: <u>n/a</u>			
Screen Interval: <u>~87-89</u>				<input type="checkbox"/> Well Volume Approach Sampling				Pump Type and Serial #: <u>Portapak Bladder SN: 141708</u>			
Borehole Diameter: <u>Unknown</u> inches				<input type="checkbox"/> Other (Specify below)				Tube/Pump Intake Depth: <u>84'</u>			
Filter Pack Interval: <u>Unknown</u>								Stabilized Pumping Rate: <u>250 ml/min</u>			
DEPTH MEASUREMENTS					VOLUME CALCULATION AND PRODUCTION INFORMATION						
		INITIAL		FINAL		Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole					
		Depth	Time	Depth	Time	Volume Per Foot: <u>NA</u>					
		FT BTOC	(24-Hour)	FT BTOC	(24-Hour)	Standing Water Column: <u>NA</u> feet					
LNAPL						1 Well Volume: _____ Gallons		3 Well Volumes: _____ Gallons			
Groundwater		<u>7.13</u>	<u>1517</u>	<u>14.17</u>	<u>1607</u>	5 Well Volumes: _____ Gallons		10 Well Volumes: _____ Gallons			
DNAPL						Total Volumes Produced: _____ Gallons					
Casing Base						Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No					
Water Level Serial #:					Water Quality Probe Type and Serial # <u>AQUA TRACK 454820</u>						
WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	1517	0	7.13	—	13.95	7.61	3581.7	0.73	4187.0	-117.6	Clear
purge	1523	1	8.41		15.25	7.65	3289.4	0.33	1616.1	-135.8	
	1526		8.68								
	1529		8.85								
	1532		8.98								
	1535										
	1538										
	1541										
NOTES						ABBREVIATIONS					
Initial/Potentiometric WL: 7.13 Date: 12-13-22 Time: 1517						Cond - Actual Conductivity					
TD=88.5 Sample time @ 1607 on 12-13-22						FT BTOC - Feet Below Top of Casing					
CPM 250						na - Not Applicable					
RAMBOLL *Battery died @ 26 min interval (1544)						nm - Not Measured					
						ORP - Oxidation-Reduction Potential					
						SEC - Specific Electrical Conductance					
						SU - Standard Units					
						Temp - Temperature					
						°C - Degrees Celsius					

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0600  
0900  
1210  
1500  
1800  
21  
24

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Parkway PP</u>				Client: <u>VISTRA</u>											
Project Number: <u>PR010265</u>			Task #: <u>1000</u>		Start Date: <u>12-13-22</u>			Time: <u>1577</u>							
Field Personnel: <u>AW</u>				Finish Date: <u>12-13-22</u>			Time: <u>1607</u>								
WELL INFORMATION					EVENT TYPE										
Well ID: <u>MW12</u>					<input type="checkbox"/> Well Development		<input checked="" type="checkbox"/> Low-Flow / Low Stress Sampling								
Casing ID: <u>2</u> inches					<input type="checkbox"/> Well Volume Approach Sampling		<input type="checkbox"/> Other (Specify):								
12245.8 WATER QUALITY INDICATOR PARAMETERS (continued)															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity				
	1543					DATA	IN	UU-SITU			Clear				
	1546														
	1549														
	1552														
	1555		11.5												
	1558		12.5												
	1601		13.0												
	1604		13.5												
STABLE	1607	3.23	14.12	6.99	14.3	7.70	3819.1	0.21	55.57	-157.3					
						AAM 12-13									
NOTES (continued)								ABBREVIATIONS							
NOTE: Battery died @ 1543 Sample time @ 1607 on 12-13-22								Cond - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured				ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius			

Battery died  
26  
29  
32  
35  
38  
41  
44  
47  
50

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION											
Site: <u>BALDWIN PP</u>				Client: <u>VISTRA</u>							
Project Number: <u>1440102653</u>				Task #: <u>1000</u>				Start Date: <u>12-13-22</u>		Time: <u>1317</u>	
Field Personnel: <u>AM/SM</u>				Finish Date: <u>12-13-22</u>				Time: <u>1422-1328</u>			
WELL INFORMATION			EVENT TYPE			PURGE INFORMATION					
Well ID: <u>MW-192</u>			<input type="checkbox"/> Well Development			Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump					
Casing ID: <u>2</u> inches			<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling			Bailer Type: <u>n/a</u>					
Screen Interval: <u>35-45</u> inches			<input type="checkbox"/> Well Volume Approach Sampling			Pump Type and Serial #: <u>Portable Blower SN 144705</u>					
Borehole Diameter: <u>Unknown</u> inches			<input type="checkbox"/> Other (Specify below)			Tube/Pump Intake Depth: <u>30'</u>					
Filter Pack Interval: <u>Unknown</u>						Stabilized Pumping Rate: <u>200 ml/min</u>					
DEPTH MEASUREMENTS					VOLUME CALCULATION AND PRODUCTION INFORMATION						
INITIAL		FINAL			Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole						
Depth	Time	Depth	Time	Volume Per Foot: <u>NA</u>							
FT BTOC	(24-Hour)	FT BTOC	(24-Hour)	Standing Water Column: <u>NA</u> feet							
LNAPL				1 Well Volumes: <u>3</u> Gallons							
Groundwater	<u>7.21</u>	<u>1317</u>	<u>16.20</u>	<u>1422</u>	5 Well Volumes: <u>10</u> Gallons						
DNAPL					Total Volumes Produced: <u>13</u> Gallons						
Casing Base					Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No						
Water Level Serial #: <u>518107</u>					Water Quality Probe Type and Serial #: <u>Aquakem 660 #454820</u>						
WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>1317</u>	<u>0</u>	<u>7.21</u>	<u>—</u>	<u>14.84</u>	<u>6.98</u>	<u>894.74</u>	<u>1.44</u>	<u>575.18</u>	<u>-109.8</u>	<u>Clear</u>
purge	<u>1320</u>	<u>123</u>	<u>8.35</u>	<u>1.14</u>	<u>13.80</u>	<u>6.95</u>	<u>902.98</u>	<u>0.84</u>	<u>356.22</u>	<u>-114.2</u>	<u>—</u>
	<u>1323</u>	<u>123</u>	<u>8.51</u>	<u>1.30</u>	DATA IN UU-SITU						
	<u>1328</u>		<u>8.65</u>	<u>1.44</u>							
	<u>1332</u>		<u>8.78</u>	<u>1.57</u>							
	<u>1335</u>		<u>8.98</u>	<u>1.77</u>							
	<u>1338</u>		<u>9.24</u>	<u>2.03</u>							
	<u>1341</u>		<u>9.44</u>	<u>2.23</u>							
NOTES										ABBREVIATIONS	
Initial/Potentiometric WL: <u>7.21</u> Date: <u>12-13-22</u> Time: <u>1317</u>										Cond - Actual Conductivity	
Sample time @ <u>1422</u> TD: <u>33.7</u>										FT BTOC - Feet Below Top of Casing	
										na - Not Applicable	
										SEC - Specific Electrical Conductance	
										SU - Standard Units	
										Temp - Temperature	
										°C - Degrees Celsius	

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0600  
0900  
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1800  
2100  
2400

**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION																	
Site: <u>BALDWIN PP</u>				Client: <u>VISTA</u>													
Project Number: <u>1940102653</u>			Task #: <u>1000</u>		Start Date: <u>12/13/22</u>		Time: <u>1317</u>										
Field Personnel: <u>AM/SM</u>					Finish Date: <u>12/13/22</u>		Time: <u>1422</u>										
WELL INFORMATION						EVENT TYPE											
Well ID: <u>MWD-192</u>						<input type="checkbox"/> Well Development						<input checked="" type="checkbox"/> Low-Flow / Low Stress Sampling					
Casing ID: <u>2</u> inches						<input type="checkbox"/> Well Volume Approach Sampling						<input type="checkbox"/> Other (Specify):					
WATER QUALITY INDICATOR PARAMETERS (continued)																	
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity						
27:00	1343		9.85	2.64	DATA	IN	VV-SITU	↓	↓	↓	Clear						
30:00	1346		9.97	2.76													
33:00	1349		10.25	3.04													
36:00	1352		11.14	3.94													
39:00	1355		11.75														
42:00	1358		12.20														
45:00	1401		12.75														
48:00	1404		12.90														
51:00	1407		13.60														
54:00	1410		14.12														
57:00	1413		14.45														
60:00	1416		15.08														
63:00	1419		15.91														
66:00	STABLE	3.48	16.20	8.99	16.86	35.9*	1688.9	0.46	36.3*	-109.3							
NOTES (continued)							ABBREVIATIONS										
Sample taken at 1422 on 12/13/22							Cond - Actual Conductivity					ORP - Oxidation-Reduction Potential					
							FT BTOC - Feet Below Top of Casing					SEC - Specific Electrical Conductance					
							na - Not Applicable					SU - Standard Units					
							nm - Not Measured					Temp - Temperature					
												°C - Degrees Celsius					

\* pH taken by gatch turbidity meter

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION											
Site: <u>Baldwin PP</u>				Client: <u>VISTA</u>				Time: <u>1148</u>			
Project Number: <u>1940102653</u>			Task #: <u>1000</u>			Start Date: <u>12-13-22</u>			Time: <u>1212</u>		
Field Personnel: <u>AAM</u>				Finish Date: <u>12-13-22</u>							
WELL INFORMATION				EVENT TYPE				PURGE INFORMATION			
Well ID: <u>MW-356</u>				<input type="checkbox"/> Well Development				Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump			
Casing ID: <u>2</u> Inches				<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling				Bailer Type: <u>n/a</u>			
Screen Interval: <u>~61-66'</u>				<input type="checkbox"/> Well Volume Approach Sampling				Pump Type and Serial #: <u>QED MicroPurge</u>			
Borehole Diameter: <u>Unknown</u> Inches				<input type="checkbox"/> Other (Specify below)				Tube/Pump Intake Depth: <u>~6.00</u>			
Filter Pack Interval: <u>Unknown</u>								Stabilized Pumping Rate: <u>200 ml/min</u>			
DEPTH MEASUREMENTS					VOLUME CALCULATION AND PRODUCTION INFORMATION						
		INITIAL		FINAL		Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole					
	Depth	Time	Depth	Time	Volume Per Foot:						
	FT BTOC	(24-Hour)	FT BTOC	(24-Hour)	Standing Water Column:	<u>NA</u> feet					
LNAPL					1 Well Volume:	Gallons	3 Well Volumes:	Gallons			
Groundwater	<u>4.41</u>	<u>1148</u>	<u>9.45</u>	<u>1212</u>	5 Well Volumes:	Gallons	10 Well Volumes:	Gallons			
DNAPL					Total Volumes Produced:	Gallons					
Casing Base					Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No						
Water Level Serial #: <u>51807</u>				Water Quality Probe Type and Serial #: <u>Agilent 100</u> <u># 454820</u>							
WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>1148</u>	<u>0</u>	<u>4.44</u>	<u>-</u>	<u>14.02</u>	<u>7.64</u>	<u>1450.4</u>	<u>0.82</u>	<u>3.21</u>	<u>-47.8</u>	<u>Clear</u>
purge	<u>1154</u>		<u>7.37</u>	<u>2.93</u>	<u>14.26</u>	<u>7.64</u>	<u>1357.2</u>	<u>0.21</u>	<u>0.00</u>	<u>-50.9</u>	
	<u>1157</u>		<u>7.20</u>	<u>2.76</u>	<u>18.54</u>	<u>7.63</u>	<u>1317.4</u>	<u>0.27</u>	<u>0.00</u>	<u>-44.3</u>	
	<u>1200</u>		<u>7.98</u>								
	<u>1203</u>		<u>8.42</u>								
	<u>1206</u>		<u>8.97</u>	<u>4.53</u>							
	<u>1209</u>		<u>9.20</u>	<u>4.76</u>							
	<u>1212</u>	<u>1.27</u>	<u>9.45</u>	<u>5.01</u>	<u>14.50</u>	<u>7.66</u>	<u>1450.4</u>	<u>0.71</u>	<u>3.21</u>	<u>-35.5</u>	<u>Clear</u>
NOTES						ABBREVIATIONS					
Initial/Potentiometric WL: <u>4.41</u> Date: <u>12-13-22</u> Time: <u>1148</u>						Cond - Actual Conductivity					
Sample time @ 1212						FT BTOC - Feet Below Top of Casing					
						na - Not Applicable					
						SEC - Specific Electrical Conductance					
						SU - Standard Units					
						Temp - Temperature					
						°C - Degrees Celsius					

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 0600  
 0910  
 1200  
 1500  
 1800  
 2100  
 2400



**WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM**

PROJECT INFORMATION															
Site: <u>Baldwin PP</u>				Client: <u>Vistra</u>				Time: <u>1004</u>							
Project Number: <u>1040102653</u>				Task #: <u>1000</u>				Start Date: <u>12/13/22</u>				Time: <u>1048</u>			
Field Personnel: <u>RAM/SM</u>				Finish Date: <u>12/13/22</u>											
WELL INFORMATION			EVENT TYPE			PURGE INFORMATION									
Well ID: <u>XPW066</u>			<input type="checkbox"/> Well Development			Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump									
Casing ID: <u>2</u> inches			<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling			Bailer Type: <u>n/a</u>									
Screen Interval: <u>~16-26'</u>			<input type="checkbox"/> Well Volume Approach Sampling			Pump Type and Serial #: <u>Alexis Peristaltic SN: 739374</u>									
Borehole Diameter: <u>Unknown</u> inches			<input type="checkbox"/> Other (Specify below)			Tube/Pump Intake Depth: <u>~8'</u>									
Filter Pack Interval: <u>Unknown</u>						Stabilized Pumping Rate: <u>250 ml/min</u>									
DEPTH MEASUREMENTS					VOLUME CALCULATION AND PRODUCTION INFORMATION										
INITIAL		FINAL			Volume Calculation Type: <input type="checkbox"/> Well Casing <input type="checkbox"/> Borehole										
Depth	Time	Depth	Time	Volume Per Foot:	Standing Water Column: _____ feet										
FT BTOC	(24-Hour)	FT BTOC	(24-Hour)		1 Well Volume: _____ Gallons 3 Well Volumes: _____ Gallons										
LNAPL					5 Well Volumes: _____ Gallons 10 Well Volumes: _____ Gallons										
Groundwater	<u>2.68</u>	<u>1004</u>	<u>3.23</u>	<u>1048</u>	Total Volumes Produced: _____ Gallons										
DNAPL					Well Purged Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No										
Casing Base															
Water Level Serial #: <u>518107</u>					Water Quality Probe Type and Serial #: <u>Aquaflow 600 #454870</u>										
WATER QUALITY INDICATOR PARAMETERS															
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mv)	Visual Clarity				
initial	<u>1004</u>	<u>0</u>	<u>2.68</u>	<u>—</u>	<u>11.24</u>	<u>7.02</u>	<u>1911.6</u>	<u>1.72</u>	<u>90.83</u>	<u>67.6</u>	<u>Clear</u>				
purge	<u>1010</u>	<u> </u>	<u>3.06</u>	<u>0.38</u>	<u>11.79</u>	<u>7.02</u>	<u>1940.9</u>	<u>0.97</u>	<u>104.15</u>	<u>13.8</u>	<u> </u>				
	<u>1013</u>	<u> </u>	<u>3.10</u>	<u>0.42</u>	<u>DATA IN</u>		<u>OU-SETU</u>								
	<u>1015</u>	<u> </u>	<u>3.15</u>	<u>0.47</u>											
	<u>1018</u>	<u> </u>	<u>3.16</u>	<u>0.48</u>											
	<u>1021</u>	<u> </u>	<u>3.17</u>	<u>0.49</u>											
	<u>1024</u>	<u> </u>	<u>3.19</u>	<u>0.50</u>											
	<u>1027</u>	<u> </u>	<u>3.20</u>	<u>0.52</u>											
	<u>2100</u>														
	<u>2100</u>														
	<u>2400</u>														
NOTES								ABBREVIATIONS							
Initial/Potentiometric WL: <u>2.68</u> Date: <u>12-13-22</u> Time: <u>1004</u>								Cond - Actual Conductivity							
<u>TD: 10.3'</u> Pump speed: <u>26.4</u>								FT BTOC - Feet Below Top of Casing							
								na - Not Applicable							
								nm - Not Measured							
								ORP - Oxidation-Reduction Potential							
								SEC - Specific Electrical Conductance							
								SU - Standard Units							
								Temp - Temperature							
								°C - Degrees Celsius							

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: Redwin PP Client: V. Saxon  
 Project Number: 194002653 Task #: 1000 Start Date: 12-13-22 Time: 1004  
 Field Personnel: AM/SM Finish Date: 12-13-22 Time: 1048

### WELL INFORMATION

Well ID: XPC006  Well Development  Low-Flow / Low Stress Sampling  
 Casing ID: 2 inches  Well Volume Approach Sampling  Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
	10:30	1	3.22	-	DATA	IN	UU	STIV			Clear
	10:33		3.22								
	10:36		3.22	0.54							
	10:39		3.22	0.54							
	10:42		3.22	0.54							
	10:45		3.23	0.55							
	10:48	2.97	3.23	0.55	11.82	7.07	1595.8	0.22	5.69	-82.4	
	10:50										
<b>NOTES (continued)</b> Sampled @ 1048 on 12/13/22 TO = 10.31											

### ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius



WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: RAVENSIN RD Client: VISTA Task #: 1000 Start Date: 12-14-22 Time: 1202  
 Project Number: 19406253 Finish Date: 12-14-22 Time: 1223  
 Field Personnel: ADM/SJM

WELL INFORMATION

Well ID: M10-306 Well Development   
 Casing ID: 2 Inches Low-Flow / Low-Stress Sampling   
 Screen Interval: 173.7-87.7 Well Volume Approach Sampling   
 Borehole Diameter: Unknown Inches Other (Specify below)   
 Filter Pack Interval: Unknown

PURGE INFORMATION

Purge Method:  Well  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: QED McGaughey #107014  
 Tube/Pump Intake Depth: 80'  
 Stabilized Pumping Rate: 250 mL/min

DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth (24-Hour)	Time	Depth (24-Hour)	Time
LNAPL				
Groundwater	<u>17.79</u>	<u>1202</u>	<u>23.84</u>	<u>1223</u>
DNAPL				
Casing Base				

Water Level Serial #: 518107

WATER QUALITY INDICATOR PARAMETERS

Water Quality Probe Type and Serial # Argonson 600 #4548200

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Initial	<u>1202</u>	<u>0</u>	<u>17.79</u>	<u>-</u>	<u>15.03</u>	<u>9.63</u>	<u>640.23</u>	<u>2.06</u>	<u>0.06</u>	<u>-15.8</u>	<u>clear</u>
purge	<u>1208</u>	<u>20.13</u>	<u>20.65</u>		<u>14.99</u>	<u>10.26</u>	<u>739.10</u>	<u>1.26</u>	<u>29.38</u>	<u>-67.7</u>	
	<u>1211</u>	<u>21.46</u>	<u>21.46</u>								
	<u>1214</u>	<u>22.08</u>	<u>22.08</u>								
	<u>1217</u>	<u>22.94</u>	<u>22.94</u>								
	<u>1220</u>	<u>23.54</u>	<u>23.54</u>								
	<u>1223</u>	<u>1.39</u>	<u>23.54</u>								

NOTES

Initial/Potentiometric WL: 17.79 Date: 12-14-22 Time: 1102

Sampled @ 1223 on 12-14-22

ABBREVIATIONS

Cond - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 mm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius



# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: BALDWIN PP Client: VISTA  
 Project Number: 194010265 Task #: 1000 Start Date: 12-14-22 Time: 1056  
 Field Personnel: AM/SM Finish Date: " Time: 1114

### WELL INFORMATION

Well ID: MUG-370  
 Casing ID: 2 Inches  
 Screen Interval: 253-63'  
 Borehole Diameter: Unknown Inches  
 Filter Pack Interval: Unknown

### EVENT TYPE

Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: QED Microge (1070-100)  
 Tube/Pump Intake Depth: 258'  
 Stabilized Pumping Rate: 2.50 ml/min

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth (FT BTOC)	Time (24-Hour)	Depth (FT BTOC)	Time (24-Hour)
LNAPL	<u>18.66</u>	<u>1056</u>	<u>250.114</u>	<u>1114</u>
Groundwater				
DNAPL				
Casing Base				
Water Level Serial #:	<u>518107</u>			

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: N/A feet  
 Standing Water Column: N/A Gallons  
 1 Well Volume: N/A Gallons  
 5 Well Volumes: N/A Gallons  
 Total Volumes Produced: N/A Gallons  
 Well Purged Day?  Yes  No

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µscm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity	Water Quality Probe Type and Serial #	
												Water Quality	Serial #
Initial	1056	0	18.66		15.54	7.60	6204.9	3.850	0.47	84.2	Clear	Agua	600 #454820
purge	1102		21.44		15.43	7.61	6474.5	0.18	0.29	-2.8			
	1105		22.35										
	1108		23.25										
	1111		24.15										
STABLE	1114	1.09	25.00	6.34	15.40	7.52	6044	0.10	0.86	2.6			

### NOTES

Initial/Potentiometric WL: 18.66 Date: 12-14-22 Time: 1056  
Sampled @ 1114 on 12-14-22

### ABBREVIATIONS

Cond - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: Baldwin Client: Vista  
 Project Number: 1940162653 Task #: 1000 Start Date: 12-13-12 Time: 0813  
 Field Personnel: RAMBOLL Finish Date: 12-13-12 Time: 0838

WELL INFORMATION

Well ID: XPW001  Well Development  
 Casing ID: 2 Inches  Low-Flow / Low-Stress Sampling  
 Screen Interval: ~3-8'  Well Volume Approach Sampling  
 Borehole Diameter: Unknown Inches  Other (Specify below)  
 Filter Pack Interval: Unknown  Stabilized Pumping Rate: 250 ml/min

PURGE INFORMATION

Purge Method:  Bailor  Pump  
 Bailor Type: n/a  
 Pump Type and Serial #: Alexander Static Pump SN: 739 329  
 Tube/Pump Intake Depth: ~131  
 TD: 15.11

DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth (FT BTOC)	Time (24-Hour)	Depth (FT BTOC)	Time (24-Hour)
LNAPL				
Groundwater	<u>10.69</u>	<u>0813</u>	<u>10.69</u>	<u>0838</u>
DNAPL				
Casing Base				

VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: MS  
 Standing Water Column: MS feet  
 1 Well Volume: MS Gallons  
 5 Well Volumes: MS Gallons  
 10 Well Volumes: MS Gallons  
 Total Volumes Produced: MS Gallons  
 Well Purged Dry?  Yes  No

WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (millary)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>0813</u>	<u>0</u>	<u>10.69</u>	<u>-</u>	<u>12.85</u>	<u>6.58</u>	<u>776.91</u>	<u>0.30</u>	<u>62.98</u>	<u>-56.7</u>	<u>turbid</u>
purge	<u>0819</u>	<u>0</u>	<u>10.69</u>	<u>-</u>	<u>12.87</u>	<u>6.58</u>	<u>775.89</u>	<u>0.22</u>	<u>38.16</u>	<u>-55.8</u>	<u>clear</u>
	<u>0822</u>	<u>0</u>	<u>10.69</u>	<u>-</u>	<u>12.99</u>	<u>6.59</u>	<u>775.32</u>	<u>0.20</u>	<u>24.59</u>	<u>-55.5</u>	<u>clear</u>
	<u>0825</u>	<u>0</u>	<u>10.69</u>	<u>-</u>	<u>Data in v-v-stn</u>						
	<u>0828</u>	<u>0</u>	<u>10.69</u>	<u>-</u>							
	<u>0831</u>	<u>0</u>	<u>10.69</u>	<u>-</u>							
	<u>0833</u>	<u>0</u>	<u>10.69</u>	<u>-</u>							
	<u>0835</u>	<u>0</u>	<u>10.69</u>	<u>-</u>							

NOTES

Initial/Potentiometric WL: 10.69 Date: 12-13-12 Time: 0813  
TD: 15.11  
Sample time @ 0838

ABBREVIATIONS

Cond - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 mm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: Baldwin Client: WISRA  
 Project Number: 1940102653 Task #: 1000 Start Date: 12-13-22 Time: 08:13  
 Field Personnel: AM/SA Finish Date: 12-13-22 Time: 08:38

WELL INFORMATION

Well ID: XPRD001  Well Development  Low-Flow / Low Stress Sampling  
 Casing ID: 2 inches  Well Volume Approach Sampling  Other (Specify):

EVENT TYPE

WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (millinery)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
12-13-22	08:38	2.2	10.69	-	13.35	6.57	779.88	0.14	5.95	54.1	Clear
<del>AM/SA 12-13-22</del>											
<del>08:38</del>											
<del>10.69</del>											
<del>Drawdown</del>											
<del>Temp. (°C)</del>											
<del>pH (SU)</del>											
<del>SEC or Cond. (µs/cm)</del>											
<del>Dissolved Oxygen (mg/L)</del>											
<del>Turbidity (NTU)</del>											
<del>ORP (mV)</del>											
<del>Visual Clarity</del>											
<del>Clear</del>											

NOTES (continued)

sample time @ 0838 on 12/13/22

ABBREVIATIONS

Cond - Actual Conductivity  
 FT BTCC - Feet Below Top of Casing  
 na - Not Applicable  
 mm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: BALDWIN  
 Project Number: 1940102053 Task #: 1000 LAB Client: VISTRA  
 Field Personnel: A. THOMPSON S. MALLOW Start Date: 12/13/22 Finish Date: 12/13/22 Time: 1600  
 Time: 1655

**WELL INFORMATION**  
 Well ID: MM-258  
 Casing ID: 2 Inches  
 Screen Interval: ~40-50 by 5 Inches  
 Borehole Diameter: Unknown Inches  
 Filter Pack Interval: Unknown Inches

**EVENT TYPE**  
 Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

**PURGE INFORMATION**  
 Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: PEQ1 737067  
 Tube/Pump Intake Depth: 24.3 FT BTOC  
 Stabilized Pumping Rate: 50 mL/min

## DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)
LNAPL				
Groundwater	<u>13.98</u>		<u>1006</u>	
DNAPL				
Casing Base				

## WATER QUALITY INDICATOR PARAMETERS

Water Level Serial #: 362 706 Water Quality Probe Type and Serial #: AQUATROL 449093

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Initial	<u>1606</u>		<u>13.98</u>		<u>11.16</u>	<u>8.45</u>	<u>51472</u>	<u>0.84</u>	<u>4088</u>	<u>-251.3</u>	<u>CLEAR</u>
purge	<u>1612</u>		<u>14.95</u>		<u>12.98</u>	<u>9.31</u>	<u>1585.4</u>	<u>0.97</u>	<u>27.70</u>	<u>-240.5</u>	
	<u>1615</u>		<u>15.57</u>								
	<u>1618</u>		<u>16.11</u>								
	<u>1621</u>		<u>16.11</u>								
	<u>1624</u>		<u>16.11</u>								
	<u>1627</u>		<u>16.11</u>								
	<u>1630</u>		<u>16.11</u>								

## NOTES

Initial/Potentiometric WL: 13.98 Date: 12/13/22 Time: 1606

**SAMPLE TIME: 1637**

**DATA W W-5TH**

## ABBREVIATIONS

Cond - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 194D102653 Task #: 1000 Start Date: 12/13/22 Time: 1601  
 Field Personnel: A. TABARES, S. MALLOS Finish Date: 12/13/22 Time: 1655

### WELL INFORMATION

Well ID: MW-258  Well Development  Low-Flow / Low Stress Sampling  
 Casing ID: 2 inches  Well Volume Approach Sampling  Other (Specify):

### WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<u>27:00</u>	<u>1633</u>	<u>0.36</u>	<u>16.11</u>	<u>2.13</u>	<u>11.85</u>	<u>9.28</u>	<u>1463.1</u>	<u>0.80</u>	<u>7.30</u>	<u>-285.5</u>	<u>CLEAR</u>
<i>[Remaining rows are crossed out with a large X]</i>											

SMA 12/13/22

### NOTES (continued)

### ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp. - Temperature  
 °C - Degrees Celsius

STABLE





# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: BALDWIN Client: VISTA  
 Project Number: 1941010 8653 Task #: 1000-LB2 Start Date: 12/13/22 Time: 11:45 AM  
 Field Personnel: J TABARES S MALLOU Finish Date: 12/13/22 Time: 1:59 PM

## WELL INFORMATION

Well ID: MW-355  
 Casing ID: 2 Inches  
 Screen Interval: 2 80-90' bgs  
 Borehole Diameter: Unknown Inches  
 Filter Pack Interval: Unknown Inches

## EVENT TYPE

Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

## PURGE INFORMATION

Purge Method:  Bailor  Pump  
 Bailor Type: n/a  
 Pump Type and Serial #: BLADDER 449093  
 Tube/Pump Intake Depth: 50 FT BTOC  
 Stabilized Pumping Rate: 50 mL/min

## DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)
LNAPL				
Groundwater	<u>78.78</u>	<u>12/13/22</u>	<u>78.78</u>	<u>12/13/22</u>
DNAPL				
Casing Base				

## VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: NA  
 Standing Water Column: NA feet  
 1 Well Volume: NA Gallons  
 5 Well Volumes: NA Gallons  
 Total Volumes Produced: NA Gallons  
 Well Purged Dry?  Yes  No

## WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity	Water Level Serial #:	
												<u>362706 (SOLINST)</u>	<u>449093</u>
Initial	<u>1452</u>		<u>78.78</u>	<u>1.0</u>	<u>9.30</u>	<u>7.92</u>	<u>3393.8</u>	<u>4.41</u>	<u>358.4</u>	<u>-110.8</u>	<u>Cloudy</u>		
purge	<u>1458</u>		<u>79.78</u>	<u>0.16</u>	<u>11.25</u>	<u>8.24</u>	<u>5401.0</u>	<u>1.41</u>	<u>51.3</u>	<u>-209.9</u>	<u>Cloudy</u>		
	<u>1501</u>		<u>79.96</u>	<u>0.18</u>									
	<u>1504</u>		<u>80.14</u>	<u>0.18</u>									
	<u>1507</u>		<u>80.32</u>	<u>0.26</u>									
	<u>1510</u>		<u>80.58</u>	<u>0.21</u>									
	<u>1513</u>		<u>80.79</u>	<u>0.32</u>									
	<u>1916</u>		<u>81.01</u>	<u>0.23</u>									

## NOTES

Initial/Potentiometric WL: 78.78 Date: 12-13-22 Time: 1447  
 SAMPLE TIME AT 1535 SAMPLE ID: MW-358

## ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp. - Temperature  
 °C - Degrees Celsius



# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: Baldwin Client: Vista  
 Project Number: 1940102653 Task #: 1000.LBR Start Date: 12-12-22 Time: 10:05 AM 12/12  
 Field Personnel: AAW/YSM Finish Date: 12-12-22 Time: 10:25

### WELL INFORMATION

Well ID: XRW04  
 Casing ID: 2 Inches  
 Screen Interval: ~16-26' Inches  
 Borehole Diameter: Unknown Inches  
 Filter Pack Interval: Unknown Inches

### EVENT TYPE

Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailor  Pump  
 Bailor Type: n/a  
 Pump Type and Serial #: Peristaltic Pump  
 Tube/Pump Intake Depth: LS.D: 39.374  
 Stabilized Pumping Rate: 250 mL/min

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)
LNAPL				
Groundwater	<u>8.06</u>	<u>10:05 AM 12-12</u>	<u>8.10</u>	<u>10:25</u>
DNAPL				
Casing Base				

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: NA  
 Standing Water Column: \_\_\_\_\_ feet  
 1 Well Volume: \_\_\_\_\_ Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Produced: See vid. notes Gallons  
 Well Purged Dry?  Yes  No

### WATER QUALITY INDICATOR PARAMETERS

Water Level Serial #: SR102 Water Quality Probe Type and Serial #: AQUATR01 600 #454 R20

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp (°C)	pH (SU)	SEC or Cond. (µscm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Initial	<u>10:05</u>	<u>610</u>	<u>8.06</u>	<u>—</u>	<u>14.45</u>	<u>7.98</u>	<u>1207.0</u>	<u>0.28</u>	<u>0.00</u>	<u>-170.0</u>	<u>Clear</u>
purge	<u>10:16</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>14.61</u>	<u>8.00</u>	<u>1199.6</u>	<u>0.23</u>	<u>0.00</u>	<u>-178.0</u>	<u>↓</u>
	<u>10:19</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>14.52</u>	<u>8.02</u>	<u>1197.4</u>	<u>0.21</u>	<u>0.00</u>	<u>-180.9</u>	<u>↓</u>
	<u>10:22</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>14.24</u>	<u>8.02</u>	<u>1199.4</u>	<u>0.20</u>	<u>0.00</u>	<u>-180.2</u>	<u>↓</u>
	<u>10:25</u>	<u>8 AM 12M</u>	<u>↓</u>	<u>↓</u>	<u>8.6</u>	<u>8.04</u>	<u>1198.4</u>	<u>0.19</u>	<u>0.00</u>	<u>-182.6</u>	<u>↓</u>
STABLE	<u>10:25</u>	<u>1.39</u>	<u>8.10</u>	<u>.04</u>	<u>14.36</u>	<u>8.04</u>	<u>1198.4</u>	<u>0.19</u>	<u>0.00</u>	<u>-182.6</u>	<u>↓</u>

### NOTES

Initial/Potentiometric WL: 8.06 Date: 12-12-2022 Time: 10:05 AM 12-12  
-Peri. Pump speed → 20g Sample time @ 10:25  
AAW 12-12-22

### ABBREVIATIONS

Cond - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius



# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: Balswin Client: V. S. S. A. R. A. Project Number: 1946102653 Task #: 1000-LBK Start Date: 12-12-22 Time: 12:17  
 Field Personnel: ANN/SGR Finish Date: 12-12-22

## WELL INFORMATION

Well ID: X P2005  
 Casing ID: 2 inches  
 Screen Interval: ~ 16-261 inches  
 Borehole Diameter: Unknown inches  
 Filter Pack Interval: Unknown inches

## EVENT TYPE

- Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

## PURGE INFORMATION

Purge Method:  Bailor  Pump  
 Bailor Type: n/a  
 Pump Type and Serial #: Perseus Rump SN # 399324  
 Tube/Pump Intake Depth: ~ 21  
 Stabilized Pumping Rate: 250 ml/min

## DEPTH MEASUREMENTS

INITIAL	FINAL
Depth FT BTCC	Depth FT BTCC
Time (24-Hour)	Time (24-Hour)

## VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type: Well Casing  
 Volume Per Foot: 1.18 gallons  
 Standing Water Column: 11.8 feet  
 1 Well Volume: 13.7 gallons  
 5 Well Volumes: 68.5 gallons  
 Total Volumes Produced: 82.2 gallons  
 Well Purged Dry?  Yes  No

## WATER QUALITY INDICATOR PARAMETERS

Water Level Serial #: 518107 Water Quality Probe Type and Serial #: AquaSensor 600 #454820

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Initial	<u>14:55:10</u>	<u>---</u>	<u>5.91</u>	<u>4.91</u>	<u>14.57</u>	<u>7.26</u>	<u>1244.2</u>	<u>0.23</u>	<u>0.00</u>	<u>-149.9</u>	<u>Clear</u>
purge	<u>12:07</u>	<u>---</u>	<u>4.95</u>	<u>0.04</u>	<u>14.44</u>	<u>7.20</u>	<u>1765.9</u>	<u>0.18</u>	<u>0.00</u>	<u>-142.4</u>	<u>---</u>
	<u>12:10</u>	<u>---</u>	<u>4.95</u>	<u>0.04</u>	<u>14.33</u>	<u>7.17</u>	<u>1220.5</u>	<u>0.15</u>	<u>0.00</u>	<u>-146.6</u>	<u>---</u>
STABLE	<u>12:17</u>	<u>1.53</u>	<u>4.95</u>	<u>0.04</u>	<u>14.33</u>	<u>7.17</u>	<u>1270.5</u>	<u>0.14</u>	<u>35.02</u>	<u>-144.9</u>	<u>---</u>

## NOTES

Initial/Potentiometric WL: 4.91 Date: 12-22-22 Time: 12:01

NOTE: extra (minute) reading at end of last HC communication

## ABBREVIATIONS

Cond - Actual Conductivity  
 FT BTCC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

error before that point  
 Sample time @ 12:17

6min  
 15min  
 18  
 21

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: Galvin  
 Project Number: 1940102653  
 Field Personnel: AAW/SM  
 Task #: 1000.LBR  
 Client: V. SGM  
 Start Date: 12-17-12  
 Finish Date: " "  
 Time: 1349

## WELL INFORMATION

Well ID: XQA02  
 Casing ID: 2 inches  
 Screen Interval: ~6-161 inches  
 Borehole Diameter: Unknown inches  
 Filter Pack Interval: Unknown inches  
 Well Development:  Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

## EVENT TYPE

## PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: Pos Peristaltic SN 2239374  
 Tube/Pump Intake Depth: ~11 FT  
 Stabilized Pumping Rate: 250 ml/min

## DEPTH MEASUREMENTS

## VOLUME CALCULATION AND PRODUCTION INFORMATION

	INITIAL		FINAL	
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)
LNAPL				
Groundwater	<u>4.44</u>	<u>13.19</u>	<u>4.50</u>	<u>14.28</u>
DNAPL				
Casing Base				

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: N/A  
 Standing Water Column: \_\_\_\_\_ feet  
 1 Well Volume: \_\_\_\_\_ Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Produced: \_\_\_\_\_ Gallons  
 Well-Purged Dry?  Yes  No

## WATER QUALITY INDICATOR PARAMETERS

Water Quality Probe Type and Serial #: Aquaton 600 # 454820

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µscm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Initial	<u>1349</u>		<u>4.44</u>		<u>13.30</u>	<u>7.37</u>	<u>1416.1</u>	<u>0.18</u>	<u>188.19</u>	<u>-159.4</u>	<u>Clear</u>
purge	<u>1358</u>		<u>4.46</u>		<u>13.35</u>	<u>7.39</u>	<u>1436.6</u>	<u>0.14</u>	<u>161.44</u>	<u>-166.7</u>	<u>1</u>
	<u>1358</u>				<u>13.43</u>	<u>7.41</u>	<u>1404.0</u>	<u>0.12</u>	<u>126.37</u>	<u>-169.2</u>	
	<u>1428</u>	<u>2.99</u>	<u>4.50</u>	<u>.06</u>	<u>13.23</u>	<u>7.53</u>	<u>1372.1</u>	<u>0.37</u>	<u>34.37</u>	<u>-174.5</u>	

## NOTES

Initial/Potentiometric WL: 9.44 Date: 12-17-12 Time: 1428

Pump speed: 28.4 Sample time @ 1428

## ABBREVIATIONS

Cond - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 mm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius



WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000 Start Date: 12-13-22 Time: 0800  
 Field Personnel: S Malow, A TARDANS Finish Date: 12-13-22 Time: 1000

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>MW-204</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailor <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>?</u> inches	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>DED. BLADDER IN WELL</u>
Borehole Diameter: <u>Unknown</u> inches	<input type="checkbox"/> Other (Specify below)	Tube/Pump Intake Depth: <u>~70'</u>
Filter Pack Interval: <u>Unknown</u>		Stabilized Pumping Rate: <u>200 ml/min</u>

DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)
LNAPL				
Groundwater	<u>12.39</u>		<u>0905</u>	
DNAPL				
Casing Base				

WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp (°C)	pH	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity	Water Quality Probe Type and Serial #	
												Water Level Serial #	Serial #
Initial	<u>0906</u>		<u>12.39</u>		<u>7.60</u>	<u>7.82</u>	<u>NK</u>	<u>12.2</u>	<u>476.29</u>	<u>26.0</u>	<u>CLEAR</u>	<u>504176</u>	<u>504859</u>
purge	<u>0912</u>		<u>15.75</u>	<u>3.36</u>	<u>7.65</u>	<u>7.94</u>	<u>NK</u>	<u>12.8.41</u>	<u>23.36</u>	<u>-114.6</u>			
	<u>12:00</u>		<u>↓</u>	<u>↓</u>									
	<u>15:00</u>		<u>↓</u>	<u>↓</u>									
	<u>18:00</u>		<u>↓</u>	<u>↓</u>									
	<u>0924</u>	<u>3m 1.0</u>	<u>19.03</u>	<u>6.63</u>	<u>7.71</u>	<u>7.89</u>	<u>NK</u>	<u>1.19</u>	<u>7.70</u>	<u>-142.9</u>			

NOTES

Initial/Potentiometric WL: 12.39 Date: 12/13/22 Time: 0905  
 COLLECTED SAMPLE @ 0926 SAMPLE ID: MW-204  
 NR: no reading recorded due to specific conductivity sensor mal function  
 RAMBOLL | Bright Ideas. Sustainable change.

ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp. - Temperature  
 °C - Degrees Celsius

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: BALEWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 000.4GR Start Date: 12-13-12 Time: 1301  
 Field Personnel: SYM, AT Finish Date: 12-13-12 Time: 1411

## WELL INFORMATION

Well ID: MW-158R  Well Development  Low-Flow / Low Stress Sampling  
 Casing ID: 2 inches  Well Volume Approach Sampling  Other (Specify):

## EVENT TYPE

## WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
27:00	1333	1	14.80	<del>1.58</del>	14.60						SLIGHTLY CLOUDY
30:00	1336		14.60	1.58							
33:00	1339		14.60	1.58							
36:00	1342		14.60	1.58							
39:00	1345		14.60								
42:00	1348		14.60								
45:00	1351		14.60								
48:00	1354		14.60								
51:00	1357		14.60								
54:00	1400		14.60								
60:00	1406	✓	14.60	✓							
63:00	1409	6300	14.60	1.58	10.53	7.08	916.3	5.43	424.21	-106.2	

NOTES (continued)

## ABBREVIATIONS

Cond - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 mm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius



# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: BALDWIN Client: VI STRA Task #: 1000.LBR Start Date: 12/15/22 Time: 1301  
 Project Number: 1640102653 Field Personnel: S. MALLOW, A. TABARES Finish Date: 12/13/22 Time: 1411

### WELL INFORMATION

Well ID: MW-158R Casing ID: A Inches  
 Screen Interval: ~10-20 Inches  
 Borehole Diameter: Unknown Inches  
 Filter Pack Interval: Unknown Inches

### EVENT TYPE

- Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: REG1 757067 ALEXIS  
 Tube/Pump Intake Depth: 19.30 ft BTOC  
 Stabilized Pumping Rate: 100 gal/min

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)
LNAPL				
Groundwater	<u>13.02</u>	<u>1305</u>		
DNAPL				
Casing Base				

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: NA  
 Standing Water Column: NA feet  
 1 Well Volume: NA Gallons  
 3 Well Volumes: NA Gallons  
 5 Well Volumes: NA Gallons  
 10 Well Volumes: NA Gallons  
 Total Volumes Produced: NA Gallons  
 Wet/Purged Dry?  Yes  No

Water Level Serial #: 362706 (SOLINST) Water Quality Probe Type and Serial #: AQUATRIP, 449093

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp (°C)	pH (SU)	SEC or Cond. (µscm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>1306</u>	<u>1</u>	<u>13.02</u>	<u>0</u>	<u>12.66</u>	<u>7.01</u>	<u>934.39</u>	<u>2.81</u>	<u>123.14</u>	<u>-198.6</u>	<u>CLOUDY</u>
purge	<u>1312</u>		<u>14.80</u>	<u>0.78</u>	<u>12.62</u>	<u>7.38</u>	<u>909.98</u>	<u>2.41</u>	<u>0.49</u>	<u>-110.1</u>	<u>CLOUDY</u>
	<u>1315</u>		<u>14.80</u>								
	<u>1318</u>										
	<u>1321</u>										
	<u>1324</u>										
	<u>1327</u>										
	<u>1330</u>										

### NOTES

Initial/Potentiometric WL: 13.02 Date: 12/13/22 Time: 1305

SAMPLE TIME @ 1411 SAMPLE ID: MW-158R

### ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 mm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius



WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: BALDWIN Client: VISRA  
 Project Number: 1940162653 Task #: 1000 Start Date: 12-14-22 Time: 1412  
 Field Personnel: S MALLOW Finish Date: 12-14-22 Time: 1645

WELL INFORMATION

Well ID: MW-393  
 Casing ID: 2 inches  
 Screen Interval: 2 inches  
 Borehole Diameter: Unknown inches  
 Filter Pack Interval: Unknown inches

EVENT TYPE

Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: RED BLADDER  
 Tube/Pump Intake Depth: ~ 66 FT BTOC  
 Stabilized Pumping Rate: 120 ml/min

DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth (FT BTOC)	Time (24-Hour)	Depth (FT BTOC)	Time (24-Hour)
LNAPL	<u>NA</u>			
Groundwater	<u>8.64</u>	<u>1415</u>		
DNAPL	<u>NA</u>			
Casing Base				

VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: \_\_\_\_\_  
 Standing Water Column: \_\_\_\_\_  
 1 Well Volume: NA Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Produced: \_\_\_\_\_ Gallons  
 Well-Priged Dry?  Yes  No

WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (milliary)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp (°C)	pH	SEC or Cond. (µscm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Initial	<u>1431</u>		<u>8.64</u>		<u>13.29</u>	<u>7.92</u>	<u>1783.1</u>	<u>2.69</u>	<u>1.54</u>	<u>-179.6</u>	<u>Cloudy</u>
purge	<u>1437</u>		<u>↓</u>	<u>↓</u>	<u>14.64</u>	<u>8.58</u>	<u>3330.5</u>	<u>1.75</u>	<u>98.26</u>	<u>-235.1</u>	<u>↑</u>
	<u>1440</u>		<u>8.16</u>	<u>0.48</u>							<u>CLEAR</u>
	<u>1443</u>										
	<u>1446</u>										
	<u>1449</u>										
	<u>1452</u>										
	<u>1455</u>										

NOTES

Initial/Potentiometric WL: 8.64 Date: 12/14/22 Time: 1415  
 SAMPLE ID: MW-393 SAMPLE TIME: 1635  
 DATA IN VISIT U

ABBREVIATIONS

Cond - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 mm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: BALDWIN Client: VISTR  
 Project Number: 940102653 Task #: 1000 Start Date: 12/14/22 Time: 1412  
 Field Personnel: S. MULLIN Finish Date: 12/14/22 Time: 1645

WELL INFORMATION

Well ID: MW-393 Well Development:  Well Volume Approach Sampling:  Other (Specify):  
 Casing ID: 2 inches

EVENT TYPE

WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (Military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
	00:27	1458									CLEAR
	00:30	1501									
	00:33	1504									
	00:36	1507									
	00:39	1510									
	00:42	1513									
	00:45	1516									
	00:48	1519									
	00:51	1522									
	00:54	1525									
	00:57	1528									
	01:00	1531									
	01:06	1534									
02:06 STRABE	1634	3,90	8.16	0.48	1544	8.64	3428.2	12.48	2105	-263.0	CLEAR

NOTES (continued)

ALL PARAMETERS STABLE EXCEPT TURBIDITY. PARTICULATES OBSERVED TRAPPED IN FLOW THROUGH CELL.

ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp. - Temperature  
 °C - Degrees Celsius

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000 Start Date: 12-14-22 Time: 1230  
 Field Personnel: S. HALLOR Finish Date: 12-14-22 Time: 1410

WELL INFORMATION

Well ID: MW-193  Well Development  Low-Flow / Low-Stress Sampling  
 Casing ID: 2 Inches  Well Volume Approach Sampling  
 Screen Interval: ~32-42' BGS Inches  Other (Specify below)  
 Borehole Diameter: Unknown Inches  
 Filter Pack Interval: Unknown

PURGE INFORMATION

Purge Method:  Bailor  Pump  
 Bailor Type: n/a  
 Pump Type and Serial #: RED BLADDER  
 Tube/Pump Intake Depth: ~38 FT BGS  
 Stabilized Pumping Rate: 120 mL/min

DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)
LNAPL	<u>NA</u>			
Groundwater	<u>8.95</u>	<u>1237</u>		
DNAPL	<u>NA</u>			

WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Initial	<u>1237</u>		<u>8.95</u>		<u>15.77</u>	<u>7.99</u>	<u>1015.4</u>	<u>5.59</u>	<u>1193.7</u>	<u>-162.7</u>	<u>CLOUDY</u>
purge	<u>1243</u>		<u>9.43</u>			<u>7.57</u>	<u>1098.6</u>	<u>6.87</u>	<u>499.27</u>	<u>-207.9</u>	
	<u>1246</u>										
	<u>1249</u>										
	<u>1252</u>										
	<u>1255</u>										
	<u>1258</u>										
	<u>1301</u>										

NOTES

Initial/Potentiometric WL: 8.95 Date: 12-14-22 Time: 1237  
 SAMPLE ID: MW-193 SAMPLE TIME: 1355  
 DATA IN VOSSIU

ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius



# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: BALBWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1600 Start Date: 12-14-22 Time: 1230  
 Field Personnel: S MALLOW Finish Date: 12-14-22 Time: 1410

## WELL INFORMATION

Well ID: MW-193  Well Development  Low-Flow / Low Stress Sampling  
 Casing ID: 2 inches  Well Volume Approach Sampling  Other (Specify):

## EVENT TYPE

## WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
	00:27										
	00:30										
	00:33										
	00:36										
	00:39										
	00:42										
	00:45										
	00:48										
	00:51										
	00:54										
	00:57										
	00:58										
	01:00										
	01:03										
	01:12										
NOTES (continued)											

DATA  
VOID

## ABBREVIATIONS

Cond - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 mg - Not Applicable  
 mm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000 Start Date: 12-14-22 Time: 1020  
 Field Personnel: SMALL GW Finish Date: 12-14-22 Time: 1205

### WELL INFORMATION

Well ID: MW-203  
 Casing ID: 2 Inches  
 Screen Interval: 2 Inches  
 Borehole Diameter: Unknown Inches  
 Filter Pack Interval: Unknown Inches

### EVENT TYPE

Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailor  Pump  
 Bailor Type: n/a  
 Pump Type and Serial #: DEV BLADDER, 10496  
 Tube/Pump Intake Depth: ~ 72'  
 Stabilized Pumping Rate: 175 mL/min

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOC	Time (24-Hour)	Depth FT BTOC	Time (24-Hour)
LNAPL	<u>NA</u>			
Groundwater	<u>26.24</u>	<u>1041</u>		
DNAPL	<u>NA</u>			
Casing Base	<u>77.90</u>	<u>1155</u>		

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: \_\_\_\_\_  
 Standing Water Column: NA Gallons  
 1 Well Volume: \_\_\_\_\_ Gallons  
 5 Well Volumes: \_\_\_\_\_ Gallons  
 Total Volumes Practiced: \_\_\_\_\_ Gallons  
 Well Purged Dry?  Yes  No

### WATER QUALITY INDICATOR PARAMETERS

Water Level Serial #: SOLINS 362706 Water Quality Probe Type and Serial #: AQUATRAC 799093

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Initial	<u>1056</u>	<u>—</u>	<u>76.24</u>	<u>—</u>	<u>14.65</u>	<u>8.00</u>	<u>1331.5</u>	<u>2.87</u>	<u>143.04</u>	<u>-58.6</u>	<u>CLEAR</u>
purge	<u>1102</u>				<u>14.35</u>	<u>8.18</u>	<u>1235.9</u>	<u>2.07</u>	<u>35.32</u>	<u>-119.0</u>	
	<u>1105</u>										
	<u>1108</u>										
	<u>1111</u>										
	<u>1114</u>		<u>31.20</u>								
	<u>1117</u>										
	<u>1120</u>										

### NOTES

Initial/Potentiometric W.L.: 26.24 Date: 12/14/22 Time: 1020  
 SAMPLE ID: MW-203 SAMPLE TIME: 1128  
 DATA IN VUSITD

### ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp. - Temperature  
 °C - Degrees Celsius



WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000 Start Date: 12/14/22 Time: 1020  
 Field Personnel: S Maklav Finish Date: 12/14/22 Time: 1205

WELL INFORMATION

Well ID: MW-203  Well Development  Low-Flow / Low Stress Sampling  
 Casing ID: 2 inches  Well Volume Approach Sampling  Other (Specify):

EVENT TYPE

WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
2030	1123	↓	↓	↓	DATA	IN	VUSITU	0.70	72.54	-210.9	CLEAR
6036	1126	1.43	34.62	8.38	14.46	9.75	1680.1				

NOTES (continued)

SPN  
 12/14/22

ABBREVIATIONS  
 Cond - Actual Conductivity  
 FT BTQC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

STABLE

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: BALDWIN Client: VISTEA  
 Project Number: 1940102653 Task #: 1000. LGR Start Date: 12/14/22 Time: 0800  
 Field Personnel: S. MALLOW A. THIBODEAU Finish Date: 12/14/22 Time: 1005

### WELL INFORMATION

Well ID: MW-307  
 Casing ID: 2 Inches  
 Screen Interval: ~ 62-72 Inches  
 Borehole Diameter: Unknown Inches  
 Filter Pack Interval: Unknown Inches

### EVENT TYPE

Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

### PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: SHADDER (BED SAMPLE PRO)  
 Tube/Pump Intake Depth: ~ 67' BGS  
 Stabilized Pumping Rate: 100 mL/min

### DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth (FT BTOC)	Time (24-Hour)	Depth (FT BTOC)	Time (24-Hour)
LNAPL	<u>NA</u>			
Groundwater	<u>7.04</u>	<u>0846</u>	<u>10.90</u>	<u>0946</u>
DNAPL	<u>NA</u>			
Casing Base	<u>73.2</u>	<u>6847</u>		

### VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: NA feet  
 Standing Water Column: NA Gallons  
 1 Well Volume: NA Gallons  
 3 Well Volumes: NA Gallons  
 5 Well Volumes: NA Gallons  
 10 Well Volumes: NA Gallons  
 Total Volumes Produced: NA Gallons  
 Well-Purged Dry?  Yes  No

Water Level Serial #: SO176 (SOLINST) Water Quality Probe Type and Serial #: AQUATROLL, 449093

### WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µscm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Initial	<u>0846</u>		<u>7.04</u>	<u>—</u>	<u>14.87</u>	<u>9.48</u>	<u>1587.8</u>	<u>5.25</u>	<u>672.33</u>	<u>121.0</u>	<u>SLIGHTLY</u>
purge	<u>0852</u>		<u>7.42</u>	<u>6.38</u>	<u>14.90</u>	<u>9.54</u>	<u>1586.4</u>	<u>183</u>	<u>6214</u>	<u>47.6</u>	
	<u>0855</u>		<u>7.42</u>	<u>0.38</u>							
	<u>0856</u>										
	<u>0901</u>										
	<u>0904</u>										
	<u>0907</u>										
	<u>0910</u>										

### NOTES

Initial/Potentiometric WL: 7.04 Date: 12/14/22 Time: 0846  
 SAMPLE TIME: 0948 SAMPLE: TO: MW-307  
 DATA IN WA-STU

### ABBREVIATIONS

Cond - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 mm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: BALDWIN Client: VISTRA  
 Project Number: 1940102653 Task #: 1000 Start Date: 12-14-22 Time: 0800  
 Field Personnel: S MALLOW & TARGUES Finish Date: 12-14-22 Time: 1005

WELL INFORMATION

Well ID: MW-307  
 Casing ID: 2 inches

Well Development  
 Well Volume Approach Sampling  
 Low-Flow / Low Stress Sampling  
 Other (Specify):

WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
2700	0913										
3000	0916										
3300	0919										
3600	0922										
3900	0925										
4200	0928										
4500	0931		10.07	3.03							
4800	0934										
5100	0937										
5400	0940										
5700	0943	✓									
6000	0946	1.59	10.90	3.86	15.10	9.44	1,458.0	0.82	442.24	-96.4	

NOTES (continued)

ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTCC - Feet Below Top of Casing  
 na - Not Applicable  
 mm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp. - Temperature  
 °C - Degrees Celsius

DATA IN VISIT

CLEAR

STABLE





WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: WADSWORTH PARK Client: WISCONSIN  
 Project Number: 194010263 Task #: 1000 Start Date: 12-14-22 Time: 1441  
 Field Personnel: AM/SM Finish Date: 12-14-22 Time: 1622

WELL INFORMATION

Well ID: MW-394 Well Development:  Well Development  
 Casing ID: 2 Inches Low-Flow / Low-Stress Sampling:   
 Screen Interval: ~30' - 86' Well Volume Approach Sampling:   
 Borehole Diameter: Unknown Inches Other (Specify below):   
 Filter Pack Interval: Unknown

EVENT TYPE

PURGE INFORMATION

Purge Method:  Bailer  Pump  
 Bailer Type: n/a  
 Pump Type and Serial #: Forbese Bailer SN144748  
 Tube/Pump Intake Depth: 80'  
 Stabilized Pumping Rate: 150 mL/min

DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOC	Time (24-hour)	Depth FT BTOC	Time (24-hour)
LNAPL				
Groundwater	<u>2.84</u>	<u>1441</u>	<u>16.8</u>	<u>1672</u>
DNAPL				

VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: NA  
 Standing Water Column: NA feet  
 1 Well Volume: NA Gallons  
 3 Well Volumes: NA Gallons  
 5 Well Volumes: NA Gallons  
 10 Well Volumes: NA Gallons  
 Total Volumes Produced: NA Gallons  
 Well Purged Dry?  Yes  No

WATER QUALITY INDICATOR PARAMETERS

Water Level Serial #: 618103 Water Quality Probe Type and Serial #: HydroCell 600 SN 4958220

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp (°C)	pH (SU)	SEC or Cond. (µscm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Initial	<u>1441</u>	<u>0</u>	<u>2.84</u>	<u>-</u>	<u>14.24</u>	<u>8.80</u>	<u>331.3</u>	<u>2.53</u>	<u>276.35</u>	<u>-80.7</u>	<u>Clear</u>
purge	<u>1447</u>		<u>4.9</u>		<u>14.74</u>	<u>7.82</u>	<u>4204.7</u>	<u>0.29</u>	<u>2913.1</u>	<u>-200.1</u>	<u>turbid</u>
	<u>1450</u>		<u>5.33</u>								
	<u>1453</u>		<u>5.84</u>								
	<u>1456</u>		<u>6.35</u>								
	<u>1459</u>		<u>6.65</u>								
	<u>1502</u>		<u>7.15</u>								
	<u>1505</u>		<u>7.43</u>								

NOTES

Initial/Potentiometric WL: 284 Date: 12-14-22 Time: 1441

Sampled @ 1522 on 12-14-22

ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp. - Temperature  
 °C - Degrees Celsius

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: RAMONIN PP Client: DISTR4  
 Project Number: 19402663 Task #: 1000 Start Date: 12-14-22 Time: 14:11  
 Field Personnel: KAM/SM Finish Date: 12-14-22 Time: 16:22

WELL INFORMATION

Well ID: WV-394 Casing ID: 2 Inches

EVENT TYPE

Well Development  Low-Flow / Low Stress Sampling  
 Well Volume Approach Sampling  Other (Specify):

WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
	1508	-	8.14	-							clear
	1514		8.49								
	1517		9.23								
	1520		9.61								
	1523		10.0								
	1526		10.4								
	1529		10.78								
	1532		11.01								
	1535		11.48								
	1538		11.90								
	1541		12.24								
	1544		12.6								
	1547		13.03								

NOTES (continued)

ABBREVIATIONS

Cond - Actual Conductivity  
 FT BTQC - Feet Below Top of Casing  
 na - Not Applicable  
 mm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

Time	Vol. Am.	OTW	ORP	Temp	SEC	Dissolved Oxygen	Turbidity	ORP	Visual Clarity
6900	1550	13.41		*23.5					
7100	1553			*23.6					
7500	1558								
7800	1601								
8100	1604								
8400	1607								
8700	1610								
9000	1613								
9300	1616								
9600	1619								
9900	1622								

\* Turbidity from Greater turbidity gauges

Summed @ 1622 on 12-14-22

RAMBOLL | Bright Ideas. Sustainable change.

16.8

13.96

14.38

14.38

14.38

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: RAMBOLL Client: DISDA  
 Project Number: PA10 1940102653 Task #: 1000 Start Date: 12-14-22 Time: 1322  
 Field Personnel: AMM/5m Finish Date: 12-14-22 Time: 1334

WELL INFORMATION

Well ID: M6-194  
 Casing ID: 2 Inches  
 Screen Interval: 21-31 Inches  
 Borehole Diameter: Unknown Inches  
 Filter Pack Interval: Unknown Inches

EVENT TYPE

Well Development  
 Low-Flow / Low-Stress Sampling  
 Well Volume Approach Sampling  
 Other (Specify below)

PURGE INFORMATION

Purge Method:  Bailor  Pump  
 Bailor Type: n/a  
 Pump Type and Serial #: portable bubble  
 Tube/Pump Intake Depth: 26'  
 Stabilized Pumping Rate: 250 mL/min → 2100 mL/min

DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth (24-Hour)	Time (24-Hour)	Depth (24-Hour)	Time (24-Hour)
LNAPL	<del>5.73</del>	<del>1322</del>	<del>14.50</del>	<del>1354</del>
Groundwater	<del>5.73</del>	<del>1322</del>	<del>14.50</del>	<del>1354</del>
DNAPL				
Casing Base				

VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type:  Well Casing  Borehole  
 Volume Per Foot: N/A  
 Standing Water Column: N/A feet  
 1 Well Volume: N/A Gallons  
 5 Well Volumes: N/A Gallons  
 Total Volumes Produced: N/A Gallons  
 Well Purged Dry?  Yes  No

WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity	Water Quality Probe Type and Serial #	
												Water Level Serial #	Serial #
initial	1322	0	5.73	-	15.02	6.84	254.62	0.47	522.20	-94.3	Clear	518107	Reynolds 6102 #4548260
purge	1328	1	9.35	-	15.29	6.84	285.31	0.32	914.54	-93.3			
	1331	1	10.14	-									
	1334	1	11.41	-									
	1336	1	12.02	-									
	1339	1	12.20	-									
	1342	1	12.20	-									
	1345	1	13.01	-									

NOTES

Initial/Potentiometric WL: 5.73 Date: 12-14-22 Time: 1322  
10:31.15 - 1336 Switched from 2500 - 100.0 mL/min  
sampled at 1354

ABBREVIATIONS

Cond - Actual Conductivity  
 FT BTOC - Feet Below Top of Casing  
 NA - Not Applicable  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius

Of course down quickly, needed to change rate from 2500 to 100 mL/min

12:14 AM

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: RAMOWEN RP Client: USTR  
 Project Number: 191010855 Task #: 1000 Start Date: 12-14-22 Time: 1322  
 Field Personnel: Ann 191 Finish Date: 12-14-22 Time: 1354

## WELL INFORMATION

Well ID: MW-174 Well Development:  Well Volume Approach Sampling:  Low-Flow / Low Stress Sampling:  Other (Specify):  
 Casing ID: 2 inches

## WATER QUALITY INDICATOR PARAMETERS (continued)

Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
	1349	1	13.70	1	1	DATA	DATA	DATA	DATA	DATA	Clear
	1351		14.30								
STABLE	1354	1.46	14.50	8.22	15.43	6.82	916.94	3.71	39.05	-27.4	

## NOTES (continued)

Sampled @ 1354 on 12-14-22  
 - Aggrate still in water level kept rising connection

## ABBREVIATIONS

Cond. - Actual Conductivity  
 FT BT00 - Feet Below Top of Casing  
 na - Not Applicable  
 nm - Not Measured  
 ORP - Oxidation-Reduction Potential  
 SEC - Specific Electrical Conductance  
 SU - Standard Units  
 Temp - Temperature  
 °C - Degrees Celsius



January 13, 2023

Eric Bauer  
Ramboll  
300 S. Wacker Drive  
Suite 130  
Chicago, IL 60606  
TEL: (414) 837-3687  
FAX: (414) 837-3608



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

**RE:** Baldwin Part 845

**WorkOrder:** 22120968

Dear Eric Bauer:

TEKLAB, INC received 8 samples on 12/14/2022 4:30:00 PM for the analysis presented in the following report.

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

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

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

Sincerely,



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

# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 449093  
Created 12/13/2022

Sensor	RDO
Serial Number	769381
Last Calibrated	12/8/2022

## Calibration Details

Slope 0.9138483  
Offset 0.00 mg/L

## Calibration point 100%

Concentration 9.81 mg/L  
Pre Measurement 100.78 %Sat  
Post Measurement 100.00 %Sat  
Temperature 20.29 °C  
Barometric Pressure 1,004.9 mbar

Sensor	Turbidity
Serial Number	770170
Last Calibrated	12/8/2022

## Calibration Details

Slope 1.085893  
Offset -3.44 NTU

## Calibration Point 1

Pre Measurement 0.00 NTU  
Post Measurement 0.00 NTU

## Calibration Point 2

Pre Measurement 113.98 NTU  
Post Measurement 124.00 NTU

Sensor	pH/ORP
Serial Number	687234
Last Calibrated	12/13/2022

## Calibration Details

## Calibration Point 1

pH of Buffer 7.04 pH  
pH mV 28.0 mV  
Temperature 8.01 °C

Pre Measurement

pH 6.40 pH  
pH mV 28.2 mV

Post Measurement

pH 7.04 pH  
pH mV 26.4 mV

Slope and Offset 1

Slope -55.79 mV/pH  
Offset 30.3 mV

ORP

ORP Solution Quick-Cal  
Offset -113.9 mV  
Temperature 8.01 °C  
Pre Measurement 275.3 mV  
Post Measurement 249.2 mV

**Sensor Conductivity**

Serial Number 694261  
Last Calibrated 12/13/2022

Calibration Details

TDS Conversion Factor (ppm) 0.65  
Cell Constant 1.094  
Reference Temperature 25.00 °C

Pre Measurement

Actual Conductivity 4,977.1 µS/cm  
Specific Conductivity 7,369.0 µS/cm

Post Measurement

Actual Conductivity 5,403.3 µS/cm  
Specific Conductivity 8,000.0 µS/cm

**Sensor Barometric Pressure**

Serial Number 449093  
Last Calibrated 12/8/2022

Calibration Details

Offset 0.57 mm Hg  
Pre Measurement 14.59 psi  
Post Measurement 14.57 psi

**Sensor Pressure**

Serial Number 448680  
Last Calibrated 12/8/2022

Calibration Details

---

Zero Offset	0.02 psi
Reference Depth	0.00 ft
Reference Offset	0.00 psi
Pre Measurement	0.01 psi
Post Measurement	0.00 psi



# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 449093  
Created 12/14/2022

Sensor	RDO
Serial Number	769381
Last Calibrated	12/8/2022

## Calibration Details

Slope 0.9138483  
Offset 0.00 mg/L

## Calibration point 100%

Concentration 9.81 mg/L  
Pre Measurement 100.78 %Sat  
Post Measurement 100.00 %Sat  
Temperature 20.29 °C  
Barometric Pressure 1,004.9 mbar

Sensor	Turbidity
Serial Number	770170
Last Calibrated	12/8/2022

## Calibration Details

Slope 1.085893  
Offset -3.44 NTU

## Calibration Point 1

Pre Measurement 0.00 NTU  
Post Measurement 0.00 NTU

## Calibration Point 2

Pre Measurement 113.98 NTU  
Post Measurement 124.00 NTU

Sensor	pH/ORP
Serial Number	687234
Last Calibrated	12/14/2022

## Calibration Details

## Calibration Point 1

pH of Buffer 7.03 pH  
pH mV 16.1 mV  
Temperature 14.55 °C

Pre Measurement

pH 7.26 pH  
pH mV 16.2 mV

Post Measurement

pH 7.03 pH  
pH mV 15.5 mV

Slope and Offset 1

Slope -57.09 mV/pH  
Offset 17.8 mV

ORP

ORP Solution Quick-Cal  
Offset -82.9 mV  
Temperature 14.55 °C  
Pre Measurement 203.2 mV  
Post Measurement 239.3 mV

**Sensor Conductivity**

Serial Number 694261  
Last Calibrated 12/14/2022

Calibration Details

TDS Conversion Factor (ppm) 0.65  
Cell Constant 1.065  
Reference Temperature 25.00 °C

Pre Measurement

Actual Conductivity 6,566.2 µS/cm  
Specific Conductivity 8,203.2 µS/cm

Post Measurement

Actual Conductivity 6,403.6 µS/cm  
Specific Conductivity 8,000.0 µS/cm

**Sensor Barometric Pressure**

Serial Number 449093  
Last Calibrated 12/8/2022

Calibration Details

Offset 0.57 mm Hg  
Pre Measurement 14.59 psi  
Post Measurement 14.57 psi

**Sensor Pressure**

Serial Number 448680  
Last Calibrated 12/8/2022

Calibration Details

---

Zero Offset	0.02 psi
Reference Depth	0.00 ft
Reference Offset	0.00 psi
Pre Measurement	0.01 psi
Post Measurement	0.00 psi

# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 449093  
Created 12/15/2022

Sensor	RDO
Serial Number	769381
Last Calibrated	12/8/2022

## Calibration Details

Slope 0.9138483  
Offset 0.00 mg/L

## Calibration point 100%

Concentration 9.81 mg/L  
Pre Measurement 100.78 %Sat  
Post Measurement 100.00 %Sat  
Temperature 20.29 °C  
Barometric Pressure 1,004.9 mbar

Sensor	Turbidity
Serial Number	770170
Last Calibrated	12/8/2022

## Calibration Details

Slope 1.085893  
Offset -3.44 NTU

## Calibration Point 1

Pre Measurement 0.00 NTU  
Post Measurement 0.00 NTU

## Calibration Point 2

Pre Measurement 113.98 NTU  
Post Measurement 124.00 NTU

Sensor	pH/ORP
Serial Number	687234
Last Calibrated	12/15/2022

## Calibration Details

## Calibration Point 1

pH of Buffer 7.03 pH  
pH mV 21.6 mV  
Temperature 13.86 °C

Pre Measurement

pH 6.93 pH  
pH mV 21.6 mV

Post Measurement

pH 7.03 pH  
pH mV 20.8 mV

Slope and Offset 1

Slope -56.95 mV/pH  
Offset 23.3 mV

ORP

ORP Solution Quick-Cal  
Offset -113.0 mV  
Temperature 13.86 °C  
Pre Measurement 270.8 mV  
Post Measurement 240.3 mV

**Sensor Conductivity**

Serial Number 694261  
Last Calibrated 12/15/2022

Calibration Details

TDS Conversion Factor (ppm) 0.65  
Cell Constant 1.017  
Reference Temperature 25.00 °C

Pre Measurement

Actual Conductivity 6,583.7 µS/cm  
Specific Conductivity 8,362.7 µS/cm

Post Measurement

Actual Conductivity 6,298.1 µS/cm  
Specific Conductivity 8,000.0 µS/cm

**Sensor Barometric Pressure**

Serial Number 449093  
Last Calibrated 12/8/2022

Calibration Details

Offset 0.57 mm Hg  
Pre Measurement 14.59 psi  
Post Measurement 14.57 psi

**Sensor Pressure**

Serial Number 448680  
Last Calibrated 12/8/2022

Calibration Details

---

Zero Offset	0.02 psi
Reference Depth	0.00 ft
Reference Offset	0.00 psi
Pre Measurement	0.01 psi
Post Measurement	0.00 psi

# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454820  
Created 12/12/2022

## Sensor Conductivity

Serial Number 881906  
Last Calibrated 12/12/2022

### *Calibration Details*

---

TDS Conversion Factor (ppm)	0.65
Cell Constant	1.299
Reference Temperature	25.00 °C

### *Pre Measurement*

---

Actual Conductivity	3,910.3 $\mu\text{S}/\text{cm}$
Specific Conductivity	5,953.1 $\mu\text{S}/\text{cm}$

### *Post Measurement*

---

Actual Conductivity	5,254.8 $\mu\text{S}/\text{cm}$
Specific Conductivity	8,000.0 $\mu\text{S}/\text{cm}$

## Sensor Turbidity

Serial Number 878454  
Last Calibrated 12/8/2022

### *Calibration Details*

---

Slope	1.042361
Offset	0.52 NTU

### *Calibration Point 1*

---

Pre Measurement	0.00 NTU
Post Measurement	0.00 NTU

### *Calibration Point 2*

---

Pre Measurement	115.94 NTU
Post Measurement	124.00 NTU

## Sensor pH/ORP

Serial Number 880042  
Last Calibrated 12/12/2022

### *Calibration Details*

### *Calibration Point 1*

---

pH of Buffer	7.04 pH
pH mV	-50.1 mV

Temperature 7.03 °C

Pre Measurement

pH 6.95 pH  
pH mV -50.2 mV

Post Measurement

pH 7.04 pH  
pH mV -47.0 mV

Slope and Offset 1

Slope -55.6 mV/pH  
Offset -47.8 mV

ORP

ORP Solution Quick-Cal  
Offset 25.7 mV  
Temperature 7.03 °C  
Pre Measurement 182.7 mV  
Post Measurement 250.6 mV

**Sensor RDO**

Serial Number 722167  
Last Calibrated 12/8/2022

Calibration Details

Slope 0.9945709  
Offset 0.00 mg/L

Calibration point 100%

Concentration 9.03 mg/L  
Pre Measurement 102.06 %Sat  
Post Measurement 100.00 %Sat  
Temperature 20.18 °C  
Barometric Pressure 1,004.9 mbar

**Sensor Barometric Pressure**

Serial Number 454820  
Last Calibrated 12/8/2022

Calibration Details

Offset -0.04 mm Hg  
Pre Measurement 14.58 psi  
Post Measurement 14.57 psi

**Sensor Pressure**

Serial Number 498420  
Last Calibrated 12/8/2022

Calibration Details



Zero Offset	-0.01 psi
Reference Depth	0.00 ft
Reference Offset	0.00 psi
Pre Measurement	0.00 psi
Post Measurement	0.00 psi

# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454820  
Created 12/14/2022

## Sensor Conductivity

Serial Number 881906  
Last Calibrated 12/14/2022

### Calibration Details

TDS Conversion Factor (ppm) 0.65  
Cell Constant 1.003  
Reference Temperature 25.00 °C

### Pre Measurement

Actual Conductivity 6,407.0  $\mu\text{S}/\text{cm}$   
Specific Conductivity 7,928.8  $\mu\text{S}/\text{cm}$

### Post Measurement

Actual Conductivity 6,464.5  $\mu\text{S}/\text{cm}$   
Specific Conductivity 8,000.0  $\mu\text{S}/\text{cm}$

## Sensor Turbidity

Serial Number 878454  
Last Calibrated 12/8/2022

### Calibration Details

Slope 1.042361  
Offset 0.52 NTU

### Calibration Point 1

Pre Measurement 0.00 NTU  
Post Measurement 0.00 NTU

### Calibration Point 2

Pre Measurement 115.94 NTU  
Post Measurement 124.00 NTU

## Sensor pH/ORP

Serial Number 880042  
Last Calibrated 12/14/2022

### Calibration Details

### Calibration Point 1

pH of Buffer 7.03 pH  
pH mV -53.2 mV

Temperature 14.95 °C

Pre Measurement

pH 7.02 pH  
pH mV -53.3 mV

Post Measurement

pH 7.03 pH  
pH mV -51.4 mV

Slope and Offset 1

Slope -57.17 mV/pH  
Offset -51.5 mV

ORP

ORP Solution Quick-Cal  
Offset 24.0 mV  
Temperature 14.95 °C  
Pre Measurement 240.3 mV  
Post Measurement 238.7 mV

**Sensor RDO**

Serial Number 722167  
Last Calibrated 12/8/2022

Calibration Details

Slope 0.9945709  
Offset 0.00 mg/L

Calibration point 100%

Concentration 9.03 mg/L  
Pre Measurement 102.06 %Sat  
Post Measurement 100.00 %Sat  
Temperature 20.18 °C  
Barometric Pressure 1,004.9 mbar

**Sensor Barometric Pressure**

Serial Number 454820  
Last Calibrated 12/8/2022

Calibration Details

Offset -0.04 mm Hg  
Pre Measurement 14.58 psi  
Post Measurement 14.57 psi

**Sensor Pressure**

Serial Number 498420  
Last Calibrated 12/8/2022

Calibration Details

Zero Offset	-0.01 psi
Reference Depth	0.00 ft
Reference Offset	0.00 psi
Pre Measurement	0.00 psi
Post Measurement	0.00 psi

# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454820  
Created 12/15/2022

## Sensor Conductivity

Serial Number 881906  
Last Calibrated 12/14/2022

### Calibration Details

TDS Conversion Factor (ppm) 0.65  
Cell Constant 1.003  
Reference Temperature 25.00 °C

### Pre Measurement

Actual Conductivity 6,407.0  $\mu\text{S}/\text{cm}$   
Specific Conductivity 7,928.8  $\mu\text{S}/\text{cm}$

### Post Measurement

Actual Conductivity 6,464.5  $\mu\text{S}/\text{cm}$   
Specific Conductivity 8,000.0  $\mu\text{S}/\text{cm}$

## Sensor Turbidity

Serial Number 878454  
Last Calibrated 12/8/2022

### Calibration Details

Slope 1.042361  
Offset 0.52 NTU

### Calibration Point 1

Pre Measurement 0.00 NTU  
Post Measurement 0.00 NTU

### Calibration Point 2

Pre Measurement 115.94 NTU  
Post Measurement 124.00 NTU

## Sensor pH/ORP

Serial Number 880042  
Last Calibrated 12/14/2022

### Calibration Details

### Calibration Point 1

pH of Buffer 7.03 pH  
pH mV -53.2 mV

Temperature 14.95 °C

Pre Measurement

pH 7.02 pH  
pH mV -53.3 mV

Post Measurement

pH 7.03 pH  
pH mV -51.4 mV

Slope and Offset 1

Slope -57.17 mV/pH  
Offset -51.5 mV

ORP

ORP Solution Quick-Cal  
Offset 24.0 mV  
Temperature 14.95 °C  
Pre Measurement 240.3 mV  
Post Measurement 238.7 mV

**Sensor RDO**

Serial Number 722167  
Last Calibrated 12/8/2022

Calibration Details

Slope 0.9945709  
Offset 0.00 mg/L

Calibration point 100%

Concentration 9.03 mg/L  
Pre Measurement 102.06 %Sat  
Post Measurement 100.00 %Sat  
Temperature 20.18 °C  
Barometric Pressure 1,004.9 mbar

**Sensor Barometric Pressure**

Serial Number 454820  
Last Calibrated 12/8/2022

Calibration Details

Offset -0.04 mm Hg  
Pre Measurement 14.58 psi  
Post Measurement 14.57 psi

**Sensor Pressure**

Serial Number 498420  
Last Calibrated 12/8/2022

Calibration Details

Zero Offset	-0.01 psi
Reference Depth	0.00 ft
Reference Offset	0.00 psi
Pre Measurement	0.00 psi
Post Measurement	0.00 psi

# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 454859  
Created 12/13/2022

## Sensor Conductivity

Serial Number 942159  
Last Calibrated 12/13/2022

### Calibration Details

TDS Conversion Factor (ppm) 0.65  
Cell Constant 1.12  
Reference Temperature 25.00 °C

### Pre Measurement

Actual Conductivity 4,453.0 µS/cm  
Specific Conductivity 7,100.2 µS/cm

### Post Measurement

Actual Conductivity 5,017.4 µS/cm  
Specific Conductivity 8,000.0 µS/cm

## Sensor RDO

Serial Number 940829  
Last Calibrated 12/8/2022

### Calibration Details

Slope 1.071886  
Offset 0.00 mg/L

### Calibration point 100%

Concentration 8.39 mg/L  
Pre Measurement 100.82 %Sat  
Post Measurement 100.00 %Sat  
Temperature 20.13 °C  
Barometric Pressure 1,004.7 mbar

## Sensor pH/ORP

Serial Number 649284  
Last Calibrated 12/13/2022

### Calibration Details

### Calibration Point 1

pH of Buffer 7.04 pH  
pH mV -9.7 mV  
Temperature 5.48 °C



Pre Measurement

pH 6.95 pH  
pH mV -9.6 mV

Post Measurement

pH 7.04 pH  
pH mV -9.0 mV

Slope and Offset 1

Slope -55.29 mV/pH  
Offset -7.5 mV

ORP

ORP Solution Quick-Cal  
Offset 20.5 mV  
Temperature 5.48 °C  
Pre Measurement 155.1 mV  
Post Measurement 253.0 mV

**Sensor Turbidity**

Serial Number 704118  
Last Calibrated 12/8/2022

Calibration Details

Slope 1.396329  
Offset -1.45 NTU

Calibration Point 1

Pre Measurement 0.37 NTU  
Post Measurement 0.00 NTU

Calibration Point 2

Pre Measurement 95.23 NTU  
Post Measurement 124.00 NTU

**Sensor Barometric Pressure**

Serial Number 454859  
Last Calibrated 12/8/2022

Calibration Details

Offset 0.12 mm Hg  
Pre Measurement 14.57 psi  
Post Measurement 14.57 psi

**Sensor Pressure**

Serial Number 760182  
Last Calibrated 12/8/2022

Calibration Details

Zero Offset	-0.01 psi
Reference Depth	0.00 ft
Reference Offset	0.00 psi
Pre Measurement	0.01 psi
Post Measurement	0.00 psi

# Calibration Report

Instrument Aqua TROLL 600 Vented  
Serial Number 508667  
Created 12/13/2021

Sensor	pH/ORP
Serial Number	649320
Last Calibrated	12/13/2021

## Calibration Details

### Calibration Point 1

pH of Buffer 7.02 pH  
pH mV -13.2 mV  
Temperature 17.43 °C

### Pre Measurement

pH 7.02 pH  
pH mV -13.4 mV

### Post Measurement

pH 7.02 pH  
pH mV -12.9 mV

### Slope and Offset 1

Slope -57.66 mV/pH  
Offset -12.1 mV

### ORP

ORP Solution	Quick-Cal
Offset	51.4 mV
Temperature	17.43 °C
Pre Measurement	237.4 mV
Post Measurement	234.9 mV

Sensor	Turbidity
Serial Number	850550
Last Calibrated	12/13/2021

## Calibration Details

Slope 1  
Offset -3.63 NTU

### Calibration Point 1

Pre Measurement 9.86 NTU  
Post Measurement 10.00 NTU

Sensor	RDO
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Serial Number 803837  
Last Calibrated 12/13/2021

Calibration Details

Slope 1.212281  
Offset 0.00 mg/L

Calibration point 100%

Concentration 7.83 mg/L  
Pre Measurement 86.54 %Sat  
Post Measurement 100.00 %Sat  
Temperature 17.14 °C  
Barometric Pressure 997.81 mbar

**Sensor Conductivity**

Serial Number 767907  
Last Calibrated 12/13/2021

Calibration Details

TDS Conversion Factor (ppm) 0.65  
Cell Constant 1.079  
Reference Temperature 25.00 °C

Pre Measurement

Actual Conductivity 6,836.5 µS/cm  
Specific Conductivity 7,991.8 µS/cm

Post Measurement

Actual Conductivity 6,843.5 µS/cm  
Specific Conductivity 8,000.0 µS/cm

**Sensor Barometric Pressure**

Serial Number 508667  
Last Calibrated 12/9/2021

Calibration Details

Offset 0.23 mm Hg  
Pre Measurement 14.27 psi  
Post Measurement 14.27 psi

**Sensor Pressure**

Serial Number 612959  
Last Calibrated Factory Defaults