



Illinois Power Resources Generating, LLC
1500 Eastport Plaza Drive
Collinsville, IL 62234

February 12, 2024

Illinois Environmental Protection Agency
DWPC – Permits MC#15
Attn: Part 845 Coal Combustion Residual Rule Submittal
1021 North Grand Avenue East
Springfield, IL 62794

Re: Edwards Power Plant Ash Pond; IEPA ID # W1438050005-01

Dear Mr. LeCrone:

In accordance with Title 35 of the Illinois Administrative Code (35 I.A.C.) § 845.610(b)(3)(D), Illinois Power Resources Generating, LLC is submitting groundwater monitoring data for the Quarter 4, 2023 sampling event at the Edwards Power Plant Ash Pond, identified by Illinois Environmental Protection Agency (IEPA) ID No. W1438050005-01. This data is being submitted and placed in the facility's operating record as required by 35 I.A.C. § 845.800(d)(15) within 60 days of receiving final laboratory analytical data. Results were compared with the groundwater protection standards (GWPSs) described in 35 I.A.C. § 845.600 to determine statistical exceedances of the GWPS.

The date of this submittal is considered to be the date that exceedances of the GWPSs were detected. This notification of exceedances of the GWPSs in 35 I.A.C. § 845.600 will be placed in the facility's operating record within 30 days as required by 35 I.A.C. § 845.800(d)(16).

As allowed in 35 I.A.C. § 845.650(e), an alternative source demonstration (ASD) will be evaluated for the detected exceedances of the GWPS and, if successfully completed, the ASD will be submitted to IEPA within 60 days of this transmittal.

Sincerely,

A handwritten signature in blue ink that reads "Dianna Tickner".

Dianna Tickner, PE, PMP
Senior Director, Demolition and Decommission

Enclosures

Groundwater Monitoring Data and Detected Exceedances, Quarter 4, 2023, Ash Pond, Edwards Power Plant, Bartonville, Illinois

35 I.A.C. § 845.610(b)(3)(D)
GROUNDWATER MONITORING DATA AND DETECTED EXCEEDANCES
QUARTER 4, 2023
ASH POND, EDWARDS POWER PLANT, BARTONVILLE, ILLINOIS

February 12, 2024

Samples were collected beginning on November 1 and ended on November 17, 2023, and analyzed for the parameters listed in Title 35 of the Illinois Administrative Code (35 I.A.C.) § 845.600(a), calcium, and turbidity. Final laboratory analytical data was received on December 14, 2023. Since Quarter 4 results were not available for inclusion in the 2023 Annual Groundwater Monitoring and Corrective Action Report (2023 Annual Report), this document also serves as an addendum to the 2023 Annual Report.

The monitoring well locations are included in **Figure 1. Attachment A** summarizes the groundwater elevation data for the Quarter 4, 2023 sampling event. **Table 1** is a summary of the field parameters and analytical results. **Attachment B** contains the associated laboratory analytical reports and field data sheets for the Quarter 4, 2023 sampling event.

Statistical procedures used to evaluate groundwater results are provided in Appendix A of the Groundwater Monitoring Plan¹ provided in the operating permit application. In accordance with 35 I.A.C. § 845.610(b)(3)(B), the Quarter 4, 2023 groundwater monitoring data were evaluated for statistical exceedances over background levels for the constituents listed in 35 I.A.C. § 845.600. **Attachment C** shows the statistically derived values compared to background levels.

In accordance with 35 I.A.C. § 845.610(b)(3)(C), the statistically derived values identified as Statistical Results in **Table 2** were compared with the groundwater protection standards (GWPSs) described in 35 I.A.C. § 845.600 to determine statistical exceedances of the GWPS, as shown in **Table 2**. The date of this submittal is considered to be the date that the exceedances were detected.

Supplemental Tables and Attachments were included in this report for wells not contained within the 35 I.A.C. § 845 Groundwater Monitoring Well Network². Supplemental **Table 3** is a summary of the field parameters and analytical results. Statistically derived values identified as Statistical Results in Supplemental **Table 4** were compared with the GWPSs. **Attachment B** contains the associated laboratory analytical reports and field data sheets for the Quarter 4, 2023 supplemental sampling event. **Attachment D** summarizes the groundwater elevation data for the Quarter 4, 2023 sampling event. **Attachment E** shows the statistically derived values compared to background levels.

As allowed in 35 I.A.C. § 845.650(e), an alternative source demonstration (ASD) will be evaluated for the detected exceedances of the GWPS and, if successfully completed, the ASD will be submitted to Illinois Environmental Protection Agency within 60 days of this transmittal.

¹ Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2021. *Groundwater Monitoring Plan. Ash Pond. Edwards Power Plant. Bartonville, Illinois. October 25, 2021.*

² Supplemental data is being provided as part of on-going nature and extent characterization activities consistent with 35 I.A.C. § 845.650(d)(1) at the Edwards Ash Pond.

TABLES

Table 1	Field Parameters and Analytical Results - Quarter 4, 2023
Table 2	Comparison of Statistical Results to GWPS - Quarter 4, 2023
Table 3	Supplemental Field Parameters and Analytical Results - Quarter 4, 2023
Table 4	Supplemental Comparison of Statistical Results to GWPS - Quarter 4, 2023

FIGURES

Figure 1	Monitoring Well Location Map
----------	------------------------------

ATTACHMENTS

Attachment A	Groundwater Elevation Data - Quarter 4, 2023
Attachment B	Laboratory Reports and Field Data Sheets - Quarter 4, 2023
Attachment C	Comparison of Statistical Results to Background - Quarter 4, 2023
Attachment D	Supplemental Groundwater Elevation Data - Quarter 4, 2023
Attachment E	Supplemental Comparison of Statistical Results to Background - Quarter 4, 2023

TABLES

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2023

845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
AP05S	Background	E003	11/06/2023	Antimony, total	0.00043 U	mg/L
AP05S	Background	E003	11/06/2023	Arsenic, total	0.00270	mg/L
AP05S	Background	E003	11/06/2023	Barium, total	1.00	mg/L
AP05S	Background	E003	11/06/2023	Beryllium, total	0.00059 U	mg/L
AP05S	Background	E003	11/06/2023	Boron, total	0.330 J+	mg/L
AP05S	Background	E003	11/06/2023	Cadmium, total	0.00074 U	mg/L
AP05S	Background	E003	11/06/2023	Calcium, total	110	mg/L
AP05S	Background	E003	11/06/2023	Chloride, total	46.0	mg/L
AP05S	Background	E003	11/06/2023	Chromium, total	0.00670	mg/L
AP05S	Background	E003	11/06/2023	Cobalt, total	0.00420	mg/L
AP05S	Background	E003	11/06/2023	Dissolved Oxygen	1.50	mg/L
AP05S	Background	E003	11/06/2023	Fluoride, total	0.04 U	mg/L
AP05S	Background	E003	11/06/2023	Lead, total	0.00380 J+	mg/L
AP05S	Background	E003	11/06/2023	Lithium, total	0.0320	mg/L
AP05S	Background	E003	11/06/2023	Mercury, total	0.00018 J	mg/L
AP05S	Background	E003	11/06/2023	Molybdenum, total	0.00082 J	mg/L
AP05S	Background	E003	11/06/2023	Oxidation Reduction Potential	-127	mV
AP05S	Background	E003	11/06/2023	pH (field)	6.8	SU
AP05S	Background	E003	11/06/2023	Radium 226 + Radium 228, total	3.94 J+	pCi/L
AP05S	Background	E003	11/06/2023	Selenium, total	0.00047 J	mg/L
AP05S	Background	E003	11/06/2023	Specific Conductance @ 25C (field)	1,670	micromhos/cm
AP05S	Background	E003	11/06/2023	Sulfate, total	0.18 U	mg/L
AP05S	Background	E003	11/06/2023	Temperature	15.6	degrees C
AP05S	Background	E003	11/06/2023	Thallium, total	0.00038 U	mg/L
AP05S	Background	E003	11/06/2023	Total Dissolved Solids	960	mg/L
AP05S	Background	E003	11/06/2023	Turbidity, field	531	NTU
AW-08	Background	E003	11/06/2023	Antimony, total	0.00087 U	mg/L
AW-08	Background	E003	11/06/2023	Arsenic, total	0.0880	mg/L
AW-08	Background	E003	11/06/2023	Barium, total	5.80	mg/L
AW-08	Background	E003	11/06/2023	Beryllium, total	0.0240	mg/L
AW-08	Background	E003	11/06/2023	Boron, total	0.350 J+	mg/L
AW-08	Background	E003	11/06/2023	Cadmium, total	0.0150	mg/L
AW-08	Background	E003	11/06/2023	Calcium, total	760	mg/L
AW-08	Background	E003	11/06/2023	Chloride, total	20.0	mg/L
AW-08	Background	E003	11/06/2023	Chromium, total	0.680	mg/L
AW-08	Background	E003	11/06/2023	Cobalt, total	0.400	mg/L
AW-08	Background	E003	11/06/2023	Dissolved Oxygen	0.0700	mg/L
AW-08	Background	E003	11/06/2023	Fluoride, total	0.175 J	mg/L
AW-08	Background	E003	11/06/2023	Lead, total	0.420	mg/L
AW-08	Background	E003	11/06/2023	Lithium, total	0.660	mg/L
AW-08	Background	E003	11/06/2023	Mercury, total	0.00110	mg/L
AW-08	Background	E003	11/06/2023	Molybdenum, total	0.0140	mg/L
AW-08	Background	E003	11/06/2023	Oxidation Reduction Potential	-150	mV
AW-08	Background	E003	11/06/2023	pH (field)	7.3	SU
AW-08	Background	E003	11/06/2023	Radium 226 + Radium 228, total	29.1	pCi/L
AW-08	Background	E003	11/06/2023	Selenium, total	0.0150	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2023

845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
AW-08	Background	E003	11/06/2023	Specific Conductance @ 25C (field)	1,550	micromhos/cm
AW-08	Background	E003	11/06/2023	Sulfate, total	0.18 U	mg/L
AW-08	Background	E003	11/06/2023	Temperature	18.6	degrees C
AW-08	Background	E003	11/06/2023	Thallium, total	0.00410	mg/L
AW-08	Background	E003	11/06/2023	Total Dissolved Solids	720	mg/L
AW-08	Background	E003	11/06/2023	Turbidity, field	1,000	NTU
AP07S	Compliance	E003	11/03/2023	Antimony, total	0.00043 U	mg/L
AP07S	Compliance	E003	11/03/2023	Arsenic, total	0.00069 U	mg/L
AP07S	Compliance	E003	11/03/2023	Barium, total	0.0480	mg/L
AP07S	Compliance	E003	11/03/2023	Beryllium, total	0.00059 U	mg/L
AP07S	Compliance	E003	11/03/2023	Boron, total	8.20	mg/L
AP07S	Compliance	E003	11/03/2023	Cadmium, total	0.00074 U	mg/L
AP07S	Compliance	E003	11/03/2023	Calcium, total	130	mg/L
AP07S	Compliance	E003	11/03/2023	Chloride, total	73.0	mg/L
AP07S	Compliance	E003	11/03/2023	Chromium, total	0.0028 U	mg/L
AP07S	Compliance	E003	11/03/2023	Cobalt, total	0.00260	mg/L
AP07S	Compliance	E003	11/03/2023	Dissolved Oxygen	0	mg/L
AP07S	Compliance	E003	11/03/2023	Fluoride, total	0.229 J	mg/L
AP07S	Compliance	E003	11/03/2023	Lead, total	0.0002 UJ	mg/L
AP07S	Compliance	E003	11/03/2023	Lithium, total	0.005 U	mg/L
AP07S	Compliance	E003	11/03/2023	Mercury, total	0.00014 U	mg/L
AP07S	Compliance	E003	11/03/2023	Molybdenum, total	0.00100	mg/L
AP07S	Compliance	E003	11/03/2023	Oxidation Reduction Potential	-56.0	mV
AP07S	Compliance	E003	11/03/2023	pH (field)	7.5	SU
AP07S	Compliance	E003	11/03/2023	Radium 226 + Radium 228, total	1.02 J+	pCi/L
AP07S	Compliance	E003	11/03/2023	Selenium, total	0.00013 U	mg/L
AP07S	Compliance	E003	11/03/2023	Specific Conductance @ 25C (field)	1,320	micromhos/cm
AP07S	Compliance	E003	11/03/2023	Sulfate, total	180	mg/L
AP07S	Compliance	E003	11/03/2023	Temperature	16.2	degrees C
AP07S	Compliance	E003	11/03/2023	Thallium, total	0.00038 U	mg/L
AP07S	Compliance	E003	11/03/2023	Total Dissolved Solids	720	mg/L
AP07S	Compliance	E003	11/03/2023	Turbidity, field	2.90	NTU
AW-01	Compliance	E003	11/06/2023	Antimony, total	0.00043 U	mg/L
AW-01	Compliance	E003	11/06/2023	Arsenic, total	0.0120	mg/L
AW-01	Compliance	E003	11/06/2023	Barium, total	0.140	mg/L
AW-01	Compliance	E003	11/06/2023	Beryllium, total	0.00059 U	mg/L
AW-01	Compliance	E003	11/06/2023	Boron, total	0.0860 J+	mg/L
AW-01	Compliance	E003	11/06/2023	Cadmium, total	0.00074 U	mg/L
AW-01	Compliance	E003	11/06/2023	Calcium, total	190	mg/L
AW-01	Compliance	E003	11/06/2023	Chloride, total	10.0	mg/L
AW-01	Compliance	E003	11/06/2023	Chromium, total	0.00410	mg/L
AW-01	Compliance	E003	11/06/2023	Cobalt, total	0.00600	mg/L
AW-01	Compliance	E003	11/06/2023	Dissolved Oxygen	1.80	mg/L
AW-01	Compliance	E003	11/06/2023	Fluoride, total	0.14 J	mg/L
AW-01	Compliance	E003	11/06/2023	Lead, total	0.00220 J+	mg/L
AW-01	Compliance	E003	11/06/2023	Lithium, total	0.007 J	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2023

845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
AW-01	Compliance	E003	11/06/2023	Mercury, total	0.00014 U	mg/L
AW-01	Compliance	E003	11/06/2023	Molybdenum, total	0.00340	mg/L
AW-01	Compliance	E003	11/06/2023	Oxidation Reduction Potential	-83.0	mV
AW-01	Compliance	E003	11/06/2023	pH (field)	6.8	SU
AW-01	Compliance	E003	11/06/2023	Radium 226 + Radium 228, total	4.72 J	pCi/L
AW-01	Compliance	E003	11/06/2023	Selenium, total	0.00032 J	mg/L
AW-01	Compliance	E003	11/06/2023	Specific Conductance @ 25C (field)	1,340	micromhos/cm
AW-01	Compliance	E003	11/06/2023	Sulfate, total	50.0	mg/L
AW-01	Compliance	E003	11/06/2023	Temperature	17.9	degrees C
AW-01	Compliance	E003	11/06/2023	Thallium, total	0.00038 U	mg/L
AW-01	Compliance	E003	11/06/2023	Total Dissolved Solids	770	mg/L
AW-01	Compliance	E003	11/06/2023	Turbidity, field	304	NTU
AW-05	Compliance	E003	11/06/2023	Antimony, total	0.00043 U	mg/L
AW-05	Compliance	E003	11/06/2023	Arsenic, total	0.00320	mg/L
AW-05	Compliance	E003	11/06/2023	Barium, total	0.110	mg/L
AW-05	Compliance	E003	11/06/2023	Beryllium, total	0.00059 U	mg/L
AW-05	Compliance	E003	11/06/2023	Boron, total	11.0	mg/L
AW-05	Compliance	E003	11/06/2023	Cadmium, total	0.00074 U	mg/L
AW-05	Compliance	E003	11/06/2023	Calcium, total	180	mg/L
AW-05	Compliance	E003	11/06/2023	Chloride, total	81.0	mg/L
AW-05	Compliance	E003	11/06/2023	Chromium, total	0.00420	mg/L
AW-05	Compliance	E003	11/06/2023	Cobalt, total	0.00330	mg/L
AW-05	Compliance	E003	11/06/2023	Dissolved Oxygen	1.50	mg/L
AW-05	Compliance	E003	11/06/2023	Fluoride, total	0.139 J	mg/L
AW-05	Compliance	E003	11/06/2023	Lead, total	0.00180 J+	mg/L
AW-05	Compliance	E003	11/06/2023	Lithium, total	0.013 J	mg/L
AW-05	Compliance	E003	11/06/2023	Mercury, total	0.00014 U	mg/L
AW-05	Compliance	E003	11/06/2023	Molybdenum, total	0.00220	mg/L
AW-05	Compliance	E003	11/06/2023	Oxidation Reduction Potential	-42.0	mV
AW-05	Compliance	E003	11/06/2023	pH (field)	6.8	SU
AW-05	Compliance	E003	11/06/2023	Radium 226 + Radium 228, total	0.465 U*	pCi/L
AW-05	Compliance	E003	11/06/2023	Selenium, total	0.00028 J	mg/L
AW-05	Compliance	E003	11/06/2023	Specific Conductance @ 25C (field)	1,730	micromhos/cm
AW-05	Compliance	E003	11/06/2023	Sulfate, total	5.70	mg/L
AW-05	Compliance	E003	11/06/2023	Temperature	17.3	degrees C
AW-05	Compliance	E003	11/06/2023	Thallium, total	0.00038 U	mg/L
AW-05	Compliance	E003	11/06/2023	Total Dissolved Solids	1,300	mg/L
AW-05	Compliance	E003	11/06/2023	Turbidity, field	699	NTU
AW-06	Compliance	E003	11/06/2023	Antimony, total	0.00043 U	mg/L
AW-06	Compliance	E003	11/06/2023	Arsenic, total	0.00440	mg/L
AW-06	Compliance	E003	11/06/2023	Barium, total	0.180	mg/L
AW-06	Compliance	E003	11/06/2023	Beryllium, total	0.00059 U	mg/L
AW-06	Compliance	E003	11/06/2023	Boron, total	0.150 J+	mg/L
AW-06	Compliance	E003	11/06/2023	Cadmium, total	0.00074 U	mg/L
AW-06	Compliance	E003	11/06/2023	Calcium, total	110	mg/L
AW-06	Compliance	E003	11/06/2023	Chloride, total	37.0	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2023

845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
AW-06	Compliance	E003	11/06/2023	Chromium, total	0.0032 J	mg/L
AW-06	Compliance	E003	11/06/2023	Cobalt, total	0.0016 J	mg/L
AW-06	Compliance	E003	11/06/2023	Dissolved Oxygen	1.60	mg/L
AW-06	Compliance	E003	11/06/2023	Fluoride, total	0.282	mg/L
AW-06	Compliance	E003	11/06/2023	Lead, total	0.00160 J+	mg/L
AW-06	Compliance	E003	11/06/2023	Lithium, total	0.014 J	mg/L
AW-06	Compliance	E003	11/06/2023	Mercury, total	0.00014 U	mg/L
AW-06	Compliance	E003	11/06/2023	Molybdenum, total	0.00470	mg/L
AW-06	Compliance	E003	11/06/2023	Oxidation Reduction Potential	-91.0	mV
AW-06	Compliance	E003	11/06/2023	pH (field)	7.4	SU
AW-06	Compliance	E003	11/06/2023	Radium 226 + Radium 228, total	0.785 J+	pCi/L
AW-06	Compliance	E003	11/06/2023	Selenium, total	0.00025 J	mg/L
AW-06	Compliance	E003	11/06/2023	Specific Conductance @ 25C (field)	1,120	micromhos/cm
AW-06	Compliance	E003	11/06/2023	Sulfate, total	23.0	mg/L
AW-06	Compliance	E003	11/06/2023	Temperature	16.1	degrees C
AW-06	Compliance	E003	11/06/2023	Thallium, total	0.00038 U	mg/L
AW-06	Compliance	E003	11/06/2023	Total Dissolved Solids	570	mg/L
AW-06	Compliance	E003	11/06/2023	Turbidity, field	609	NTU
AW-09	Compliance	E003	11/06/2023	Antimony, total	0.00043 U	mg/L
AW-09	Compliance	E003	11/06/2023	Arsenic, total	0.0240	mg/L
AW-09	Compliance	E003	11/06/2023	Barium, total	0.430	mg/L
AW-09	Compliance	E003	11/06/2023	Beryllium, total	0.00059 U	mg/L
AW-09	Compliance	E003	11/06/2023	Boron, total	0.310 J+	mg/L
AW-09	Compliance	E003	11/06/2023	Cadmium, total	0.00074 U	mg/L
AW-09	Compliance	E003	11/06/2023	Calcium, total	120	mg/L
AW-09	Compliance	E003	11/06/2023	Chloride, total	29.0	mg/L
AW-09	Compliance	E003	11/06/2023	Chromium, total	0.0028 U	mg/L
AW-09	Compliance	E003	11/06/2023	Cobalt, total	0.00310	mg/L
AW-09	Compliance	E003	11/06/2023	Dissolved Oxygen	1.80	mg/L
AW-09	Compliance	E003	11/06/2023	Fluoride, total	0.128 J	mg/L
AW-09	Compliance	E003	11/06/2023	Lead, total	0.00120 J+	mg/L
AW-09	Compliance	E003	11/06/2023	Lithium, total	0.017 J	mg/L
AW-09	Compliance	E003	11/06/2023	Mercury, total	0.00014 U	mg/L
AW-09	Compliance	E003	11/06/2023	Molybdenum, total	0.0210	mg/L
AW-09	Compliance	E003	11/06/2023	Oxidation Reduction Potential	-110	mV
AW-09	Compliance	E003	11/06/2023	pH (field)	7.1	SU
AW-09	Compliance	E003	11/06/2023	Radium 226 + Radium 228, total	1.35 J+	pCi/L
AW-09	Compliance	E003	11/06/2023	Selenium, total	0.00026 J	mg/L
AW-09	Compliance	E003	11/06/2023	Specific Conductance @ 25C (field)	1,480	micromhos/cm
AW-09	Compliance	E003	11/06/2023	Sulfate, total	0.18 U	mg/L
AW-09	Compliance	E003	11/06/2023	Temperature	16.9	degrees C
AW-09	Compliance	E003	11/06/2023	Thallium, total	0.00038 U	mg/L
AW-09	Compliance	E003	11/06/2023	Total Dissolved Solids	800	mg/L
AW-09	Compliance	E003	11/06/2023	Turbidity, field	234	NTU
AW-10	Compliance	E003	11/06/2023	Antimony, total	0.00051 J	mg/L
AW-10	Compliance	E003	11/06/2023	Arsenic, total	0.0120	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2023

845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
AW-10	Compliance	E003	11/06/2023	Barium, total	1.00	mg/L
AW-10	Compliance	E003	11/06/2023	Beryllium, total	0.00130	mg/L
AW-10	Compliance	E003	11/06/2023	Boron, total	0.470 J+	mg/L
AW-10	Compliance	E003	11/06/2023	Cadmium, total	0.00074 U	mg/L
AW-10	Compliance	E003	11/06/2023	Calcium, total	140	mg/L
AW-10	Compliance	E003	11/06/2023	Chloride, total	84.0	mg/L
AW-10	Compliance	E003	11/06/2023	Chromium, total	0.0290	mg/L
AW-10	Compliance	E003	11/06/2023	Cobalt, total	0.0180	mg/L
AW-10	Compliance	E003	11/06/2023	Dissolved Oxygen	1.60	mg/L
AW-10	Compliance	E003	11/06/2023	Fluoride, total	0.04 U	mg/L
AW-10	Compliance	E003	11/06/2023	Lead, total	0.0180	mg/L
AW-10	Compliance	E003	11/06/2023	Lithium, total	0.0580	mg/L
AW-10	Compliance	E003	11/06/2023	Mercury, total	0.00014 U	mg/L
AW-10	Compliance	E003	11/06/2023	Molybdenum, total	0.00190	mg/L
AW-10	Compliance	E003	11/06/2023	Oxidation Reduction Potential	-125	mV
AW-10	Compliance	E003	11/06/2023	pH (field)	7.3	SU
AW-10	Compliance	E003	11/06/2023	Radium 226 + Radium 228, total	3.58 J+	pCi/L
AW-10	Compliance	E003	11/06/2023	Selenium, total	0.00110	mg/L
AW-10	Compliance	E003	11/06/2023	Specific Conductance @ 25C (field)	2,190	micromhos/cm
AW-10	Compliance	E003	11/06/2023	Sulfate, total	0.18 U	mg/L
AW-10	Compliance	E003	11/06/2023	Temperature	17.8	degrees C
AW-10	Compliance	E003	11/06/2023	Thallium, total	0.00068 J	mg/L
AW-10	Compliance	E003	11/06/2023	Total Dissolved Solids	1,100	mg/L
AW-10	Compliance	E003	11/06/2023	Turbidity, field	520	NTU
AW-11	Compliance	E003	11/03/2023	Antimony, total	0.00043 U	mg/L
AW-11	Compliance	E003	11/03/2023	Arsenic, total	0.0110	mg/L
AW-11	Compliance	E003	11/03/2023	Barium, total	0.840	mg/L
AW-11	Compliance	E003	11/03/2023	Beryllium, total	0.00059 U	mg/L
AW-11	Compliance	E003	11/03/2023	Boron, total	0.260 J+	mg/L
AW-11	Compliance	E003	11/03/2023	Cadmium, total	0.00074 U	mg/L
AW-11	Compliance	E003	11/03/2023	Calcium, total	160	mg/L
AW-11	Compliance	E003	11/03/2023	Chloride, total	33.0	mg/L
AW-11	Compliance	E003	11/03/2023	Chromium, total	0.0028 U	mg/L
AW-11	Compliance	E003	11/03/2023	Cobalt, total	0.0019 J	mg/L
AW-11	Compliance	E003	11/03/2023	Dissolved Oxygen	1.90	mg/L
AW-11	Compliance	E003	11/03/2023	Fluoride, total	0.0662 J	mg/L
AW-11	Compliance	E003	11/03/2023	Lead, total	0.0002 UJ	mg/L
AW-11	Compliance	E003	11/03/2023	Lithium, total	0.018 J	mg/L
AW-11	Compliance	E003	11/03/2023	Mercury, total	0.00014 U	mg/L
AW-11	Compliance	E003	11/03/2023	Molybdenum, total	0.00200	mg/L
AW-11	Compliance	E003	11/03/2023	Oxidation Reduction Potential	-148	mV
AW-11	Compliance	E003	11/03/2023	pH (field)	6.9	SU
AW-11	Compliance	E003	11/03/2023	Radium 226 + Radium 228, total	1.94 J+	pCi/L
AW-11	Compliance	E003	11/03/2023	Selenium, total	0.00027 J	mg/L
AW-11	Compliance	E003	11/03/2023	Specific Conductance @ 25C (field)	1,850	micromhos/cm
AW-11	Compliance	E003	11/03/2023	Sulfate, total	0.18 U	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2023

845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
AW-11	Compliance	E003	11/03/2023	Temperature	14.8	degrees C
AW-11	Compliance	E003	11/03/2023	Thallium, total	0.00038 U	mg/L
AW-11	Compliance	E003	11/03/2023	Total Dissolved Solids	870	mg/L
AW-11	Compliance	E003	11/03/2023	Turbidity, field	169	NTU
AW-14	Compliance	E003	11/03/2023	Antimony, total	0.00054 J	mg/L
AW-14	Compliance	E003	11/03/2023	Arsenic, total	0.00410	mg/L
AW-14	Compliance	E003	11/03/2023	Barium, total	0.830	mg/L
AW-14	Compliance	E003	11/03/2023	Beryllium, total	0.00059 U	mg/L
AW-14	Compliance	E003	11/03/2023	Boron, total	0.240 J+	mg/L
AW-14	Compliance	E003	11/03/2023	Cadmium, total	0.00074 U	mg/L
AW-14	Compliance	E003	11/03/2023	Calcium, total	170	mg/L
AW-14	Compliance	E003	11/03/2023	Chloride, total	28.0	mg/L
AW-14	Compliance	E003	11/03/2023	Chromium, total	0.0028 U	mg/L
AW-14	Compliance	E003	11/03/2023	Cobalt, total	0.0018 J	mg/L
AW-14	Compliance	E003	11/03/2023	Dissolved Oxygen	1.60	mg/L
AW-14	Compliance	E003	11/03/2023	Fluoride, total	0.0524 J	mg/L
AW-14	Compliance	E003	11/03/2023	Lead, total	0.0002 UJ	mg/L
AW-14	Compliance	E003	11/03/2023	Lithium, total	0.016 J	mg/L
AW-14	Compliance	E003	11/03/2023	Mercury, total	0.00014 U	mg/L
AW-14	Compliance	E003	11/03/2023	Molybdenum, total	0.00180	mg/L
AW-14	Compliance	E003	11/03/2023	Oxidation Reduction Potential	-128	mV
AW-14	Compliance	E003	11/03/2023	pH (field)	6.8	SU
AW-14	Compliance	E003	11/03/2023	Radium 226 + Radium 228, total	1.87 J+	pCi/L
AW-14	Compliance	E003	11/03/2023	Selenium, total	0.0005 J	mg/L
AW-14	Compliance	E003	11/03/2023	Specific Conductance @ 25C (field)	1,840	micromhos/cm
AW-14	Compliance	E003	11/03/2023	Sulfate, total	6.50	mg/L
AW-14	Compliance	E003	11/03/2023	Temperature	14.5	degrees C
AW-14	Compliance	E003	11/03/2023	Thallium, total	0.00038 U	mg/L
AW-14	Compliance	E003	11/03/2023	Total Dissolved Solids	980	mg/L
AW-14	Compliance	E003	11/03/2023	Turbidity, field	330	NTU
AW-15	Compliance	E003	11/02/2023	Antimony, total	0.00043 U	mg/L
AW-15	Compliance	E003	11/02/2023	Arsenic, total	0.00180	mg/L
AW-15	Compliance	E003	11/02/2023	Barium, total	1.90	mg/L
AW-15	Compliance	E003	11/02/2023	Beryllium, total	0.00059 U	mg/L
AW-15	Compliance	E003	11/02/2023	Boron, total	0.400 J+	mg/L
AW-15	Compliance	E003	11/02/2023	Cadmium, total	0.00074 U	mg/L
AW-15	Compliance	E003	11/02/2023	Calcium, total	140	mg/L
AW-15	Compliance	E003	11/02/2023	Chloride, total	34.0	mg/L
AW-15	Compliance	E003	11/02/2023	Chromium, total	0.0028 U	mg/L
AW-15	Compliance	E003	11/02/2023	Cobalt, total	0.0017 J	mg/L
AW-15	Compliance	E003	11/02/2023	Dissolved Oxygen	0	mg/L
AW-15	Compliance	E003	11/02/2023	Fluoride, total	0.04 U	mg/L
AW-15	Compliance	E003	11/02/2023	Lead, total	0.00022 U	mg/L
AW-15	Compliance	E003	11/02/2023	Lithium, total	0.0290	mg/L
AW-15	Compliance	E003	11/02/2023	Mercury, total	0.00015 J	mg/L
AW-15	Compliance	E003	11/02/2023	Molybdenum, total	0.00074 U	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2023

845 QUARTERLY REPORT
 EDWARDS POWER PLANT
 ASH POND
 BARTONVILLE, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
AW-15	Compliance	E003	11/02/2023	Oxidation Reduction Potential	-95.0	mV
AW-15	Compliance	E003	11/02/2023	pH (field)	7.0	SU
AW-15	Compliance	E003	11/02/2023	Radium 226 + Radium 228, total	5.52 J+	pCi/L
AW-15	Compliance	E003	11/02/2023	Selenium, total	0.00036 J	mg/L
AW-15	Compliance	E003	11/02/2023	Specific Conductance @ 25C (field)	1,948	micromhos/cm
AW-15	Compliance	E003	11/02/2023	Sulfate, total	0.21 J	mg/L
AW-15	Compliance	E003	11/02/2023	Temperature	14.0	degrees C
AW-15	Compliance	E003	11/02/2023	Thallium, total	0.00038 U	mg/L
AW-15	Compliance	E003	11/17/2023	Total Dissolved Solids	1,000 J	mg/L
AW-15	Compliance	E003	11/02/2023	Turbidity, field	2.50	NTU
AW-15S	Compliance	E003	11/02/2023	Antimony, total	0.00043 U	mg/L
AW-15S	Compliance	E003	11/02/2023	Arsenic, total	0.00069 U	mg/L
AW-15S	Compliance	E003	11/02/2023	Barium, total	0.0840	mg/L
AW-15S	Compliance	E003	11/02/2023	Beryllium, total	0.00059 U	mg/L
AW-15S	Compliance	E003	11/02/2023	Boron, total	6.00	mg/L
AW-15S	Compliance	E003	11/02/2023	Cadmium, total	0.00074 U	mg/L
AW-15S	Compliance	E003	11/02/2023	Calcium, total	270	mg/L
AW-15S	Compliance	E003	11/02/2023	Chloride, total	30.0	mg/L
AW-15S	Compliance	E003	11/02/2023	Chromium, total	0.0028 U	mg/L
AW-15S	Compliance	E003	11/02/2023	Cobalt, total	0.00065 J	mg/L
AW-15S	Compliance	E003	11/02/2023	Dissolved Oxygen	0	mg/L
AW-15S	Compliance	E003	11/02/2023	Fluoride, total	0.258	mg/L
AW-15S	Compliance	E003	11/02/2023	Lead, total	0.00022 U	mg/L
AW-15S	Compliance	E003	11/02/2023	Lithium, total	0.014 J	mg/L
AW-15S	Compliance	E003	11/02/2023	Mercury, total	0.00014 U	mg/L
AW-15S	Compliance	E003	11/02/2023	Molybdenum, total	0.00350	mg/L
AW-15S	Compliance	E003	11/02/2023	Oxidation Reduction Potential	1.00	mV
AW-15S	Compliance	E003	11/02/2023	pH (field)	7.0	SU
AW-15S	Compliance	E003	11/02/2023	Selenium, total	0.00100	mg/L
AW-15S	Compliance	E003	11/02/2023	Specific Conductance @ 25C (field)	1,795	micromhos/cm
AW-15S	Compliance	E003	11/02/2023	Sulfate, total	550	mg/L
AW-15S	Compliance	E003	11/02/2023	Temperature	16.1	degrees C
AW-15S	Compliance	E003	11/02/2023	Thallium, total	0.00038 U	mg/L
AW-15S	Compliance	E003	11/17/2023	Total Dissolved Solids	1,200	mg/L
AW-15S	Compliance	E003	11/02/2023	Turbidity, field	1.60	NTU
AW-16	Compliance	E003	11/02/2023	Antimony, total	0.00043 U	mg/L
AW-16	Compliance	E003	11/02/2023	Arsenic, total	0.00120	mg/L
AW-16	Compliance	E003	11/02/2023	Barium, total	1.10	mg/L
AW-16	Compliance	E003	11/02/2023	Beryllium, total	0.00059 U	mg/L
AW-16	Compliance	E003	11/02/2023	Boron, total	0.420 J+	mg/L
AW-16	Compliance	E003	11/02/2023	Cadmium, total	0.00074 U	mg/L
AW-16	Compliance	E003	11/02/2023	Calcium, total	150	mg/L
AW-16	Compliance	E003	11/02/2023	Chloride, total	48.0	mg/L
AW-16	Compliance	E003	11/02/2023	Chromium, total	0.0028 U	mg/L
AW-16	Compliance	E003	11/02/2023	Cobalt, total	0.0016 J	mg/L
AW-16	Compliance	E003	11/02/2023	Dissolved Oxygen	0.860	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2023

845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
AW-16	Compliance	E003	11/02/2023	Fluoride, total	0.04 U	mg/L
AW-16	Compliance	E003	11/02/2023	Lead, total	0.00022 U	mg/L
AW-16	Compliance	E003	11/02/2023	Lithium, total	0.0290	mg/L
AW-16	Compliance	E003	11/02/2023	Mercury, total	0.00018 J	mg/L
AW-16	Compliance	E003	11/02/2023	Molybdenum, total	0.00074 U	mg/L
AW-16	Compliance	E003	11/02/2023	Oxidation Reduction Potential	-126	mV
AW-16	Compliance	E003	11/02/2023	pH (field)	6.7	SU
AW-16	Compliance	E003	11/02/2023	Radium 226 + Radium 228, total	3.93 J+	pCi/L
AW-16	Compliance	E003	11/02/2023	Selenium, total	0.00024 J	mg/L
AW-16	Compliance	E003	11/02/2023	Specific Conductance @ 25C (field)	2,180	micromhos/cm
AW-16	Compliance	E003	11/02/2023	Sulfate, total	0.81 J	mg/L
AW-16	Compliance	E003	11/02/2023	Temperature	14.6	degrees C
AW-16	Compliance	E003	11/02/2023	Thallium, total	0.00038 U	mg/L
AW-16	Compliance	E003	11/17/2023	Total Dissolved Solids	1,100 J	mg/L
AW-16	Compliance	E003	11/02/2023	Turbidity, field	0 U	NTU
AW-17	Compliance	E003	11/01/2023	Antimony, total	0.00043 U	mg/L
AW-17	Compliance	E003	11/01/2023	Arsenic, total	0.00360	mg/L
AW-17	Compliance	E003	11/01/2023	Barium, total	0.970	mg/L
AW-17	Compliance	E003	11/01/2023	Beryllium, total	0.00059 U	mg/L
AW-17	Compliance	E003	11/01/2023	Boron, total	0.420 J+	mg/L
AW-17	Compliance	E003	11/01/2023	Cadmium, total	0.00074 U	mg/L
AW-17	Compliance	E003	11/01/2023	Calcium, total	100	mg/L
AW-17	Compliance	E003	11/01/2023	Chloride, total	53.0	mg/L
AW-17	Compliance	E003	11/01/2023	Chromium, total	0.0028 U	mg/L
AW-17	Compliance	E003	11/01/2023	Cobalt, total	0.00220	mg/L
AW-17	Compliance	E003	11/01/2023	Dissolved Oxygen	0.880	mg/L
AW-17	Compliance	E003	11/01/2023	Fluoride, total	0.0458 J-	mg/L
AW-17	Compliance	E003	11/01/2023	Lead, total	0.0002 UJ	mg/L
AW-17	Compliance	E003	11/01/2023	Lithium, total	0.0330	mg/L
AW-17	Compliance	E003	11/01/2023	Mercury, total	0.00014 U	mg/L
AW-17	Compliance	E003	11/01/2023	Molybdenum, total	0.00074 U	mg/L
AW-17	Compliance	E003	11/01/2023	Oxidation Reduction Potential	-115	mV
AW-17	Compliance	E003	11/01/2023	pH (field)	6.8	SU
AW-17	Compliance	E003	11/01/2023	Radium 226 + Radium 228, total	2.75 J+	pCi/L
AW-17	Compliance	E003	11/01/2023	Selenium, total	0.00074 U	mg/L
AW-17	Compliance	E003	11/01/2023	Specific Conductance @ 25C (field)	1,840	micromhos/cm
AW-17	Compliance	E003	11/01/2023	Sulfate, total	0.18 U	mg/L
AW-17	Compliance	E003	11/01/2023	Temperature	13.1	degrees C
AW-17	Compliance	E003	11/01/2023	Thallium, total	0.00038 U	mg/L
AW-17	Compliance	E003	11/01/2023	Total Dissolved Solids	1,000	mg/L
AW-17	Compliance	E003	11/01/2023	Turbidity, field	118	NTU
AW-18	Compliance	E003	11/01/2023	Antimony, total	0.00043 U	mg/L
AW-18	Compliance	E003	11/01/2023	Arsenic, total	0.00420	mg/L
AW-18	Compliance	E003	11/01/2023	Barium, total	1.50	mg/L
AW-18	Compliance	E003	11/01/2023	Beryllium, total	0.00059 U	mg/L
AW-18	Compliance	E003	11/01/2023	Boron, total	0.330 J+	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2023

845 QUARTERLY REPORT
 EDWARDS POWER PLANT
 ASH POND
 BARTONVILLE, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
AW-18	Compliance	E003	11/01/2023	Cadmium, total	0.00074 U	mg/L
AW-18	Compliance	E003	11/01/2023	Calcium, total	120	mg/L
AW-18	Compliance	E003	11/01/2023	Chloride, total	89.0	mg/L
AW-18	Compliance	E003	11/01/2023	Chromium, total	0.003 J	mg/L
AW-18	Compliance	E003	11/01/2023	Cobalt, total	0.0014 J	mg/L
AW-18	Compliance	E003	11/01/2023	Dissolved Oxygen	0.880	mg/L
AW-18	Compliance	E003	11/01/2023	Fluoride, total	0.0915 J	mg/L
AW-18	Compliance	E003	11/01/2023	Lead, total	0.00130 J+	mg/L
AW-18	Compliance	E003	11/01/2023	Lithium, total	0.0270	mg/L
AW-18	Compliance	E003	11/01/2023	Mercury, total	0.00014 U	mg/L
AW-18	Compliance	E003	11/01/2023	Molybdenum, total	0.00150	mg/L
AW-18	Compliance	E003	11/01/2023	Oxidation Reduction Potential	-111	mV
AW-18	Compliance	E003	11/01/2023	pH (field)	6.8	SU
AW-18	Compliance	E003	11/01/2023	Radium 226 + Radium 228, total	4.06 J+	pCi/L
AW-18	Compliance	E003	11/01/2023	Selenium, total	0.00074 U	mg/L
AW-18	Compliance	E003	11/01/2023	Specific Conductance @ 25C (field)	1,840	micromhos/cm
AW-18	Compliance	E003	11/01/2023	Sulfate, total	8.20	mg/L
AW-18	Compliance	E003	11/01/2023	Temperature	13.4	degrees C
AW-18	Compliance	E003	11/01/2023	Thallium, total	0.00038 U	mg/L
AW-18	Compliance	E003	11/01/2023	Total Dissolved Solids	800 J	mg/L
AW-18	Compliance	E003	11/01/2023	Turbidity, field	149	NTU
AW-19	Compliance	E003	11/01/2023	Antimony, total	0.00043 U	mg/L
AW-19	Compliance	E003	11/01/2023	Arsenic, total	0.0100	mg/L
AW-19	Compliance	E003	11/01/2023	Barium, total	0.190	mg/L
AW-19	Compliance	E003	11/01/2023	Beryllium, total	0.00059 U	mg/L
AW-19	Compliance	E003	11/01/2023	Boron, total	3.20	mg/L
AW-19	Compliance	E003	11/01/2023	Cadmium, total	0.00074 U	mg/L
AW-19	Compliance	E003	11/01/2023	Calcium, total	120	mg/L
AW-19	Compliance	E003	11/01/2023	Chloride, total	77.0	mg/L
AW-19	Compliance	E003	11/01/2023	Chromium, total	0.0028 U	mg/L
AW-19	Compliance	E003	11/01/2023	Cobalt, total	0.0011 J	mg/L
AW-19	Compliance	E003	11/01/2023	Dissolved Oxygen	1.00	mg/L
AW-19	Compliance	E003	11/01/2023	Fluoride, total	0.212 J	mg/L
AW-19	Compliance	E003	11/01/2023	Lead, total	0.0002 UJ	mg/L
AW-19	Compliance	E003	11/01/2023	Lithium, total	0.011 J	mg/L
AW-19	Compliance	E003	11/01/2023	Mercury, total	0.00014 U	mg/L
AW-19	Compliance	E003	11/01/2023	Molybdenum, total	0.00410	mg/L
AW-19	Compliance	E003	11/01/2023	Oxidation Reduction Potential	-66.0	mV
AW-19	Compliance	E003	11/01/2023	pH (field)	7.0	SU
AW-19	Compliance	E003	11/01/2023	Radium 226 + Radium 228, total	0.982 J+	pCi/L
AW-19	Compliance	E003	11/01/2023	Selenium, total	0.00074 U	mg/L
AW-19	Compliance	E003	11/01/2023	Specific Conductance @ 25C (field)	1,140	micromhos/cm
AW-19	Compliance	E003	11/01/2023	Sulfate, total	57.0	mg/L
AW-19	Compliance	E003	11/01/2023	Temperature	14.4	degrees C
AW-19	Compliance	E003	11/01/2023	Thallium, total	0.00038 U	mg/L
AW-19	Compliance	E003	11/01/2023	Total Dissolved Solids	760	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2023

845 QUARTERLY REPORT
 EDWARDS POWER PLANT
 ASH POND
 BARTONVILLE, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
AW-19	Compliance	E003	11/01/2023	Turbidity, field	79.1	NTU
AW-21	Compliance	E003	11/02/2023	Antimony, total	0.0006 J	mg/L
AW-21	Compliance	E003	11/02/2023	Arsenic, total	0.00097 J	mg/L
AW-21	Compliance	E003	11/02/2023	Barium, total	0.0510	mg/L
AW-21	Compliance	E003	11/02/2023	Beryllium, total	0.00059 U	mg/L
AW-21	Compliance	E003	11/02/2023	Boron, total	12.0	mg/L
AW-21	Compliance	E003	11/02/2023	Cadmium, total	0.00074 U	mg/L
AW-21	Compliance	E003	11/02/2023	Calcium, total	120	mg/L
AW-21	Compliance	E003	11/02/2023	Chloride, total	97.0	mg/L
AW-21	Compliance	E003	11/02/2023	Chromium, total	0.0028 U	mg/L
AW-21	Compliance	E003	11/02/2023	Cobalt, total	0.00057 J	mg/L
AW-21	Compliance	E003	11/02/2023	Dissolved Oxygen	2.40	mg/L
AW-21	Compliance	E003	11/02/2023	Fluoride, total	0.399	mg/L
AW-21	Compliance	E003	11/02/2023	Lead, total	0.00022 U	mg/L
AW-21	Compliance	E003	11/02/2023	Lithium, total	0.005 U	mg/L
AW-21	Compliance	E003	11/02/2023	Mercury, total	0.00014 U	mg/L
AW-21	Compliance	E003	11/02/2023	Molybdenum, total	0.0280	mg/L
AW-21	Compliance	E003	11/02/2023	Oxidation Reduction Potential	46.0	mV
AW-21	Compliance	E003	11/02/2023	pH (field)	7.2	SU
AW-21	Compliance	E003	11/02/2023	Radium 226 + Radium 228, total	1.26 J	pCi/L
AW-21	Compliance	E003	11/02/2023	Selenium, total	0.00300	mg/L
AW-21	Compliance	E003	11/02/2023	Specific Conductance @ 25C (field)	1,100	micromhos/cm
AW-21	Compliance	E003	11/02/2023	Sulfate, total	260	mg/L
AW-21	Compliance	E003	11/02/2023	Temperature	15.4	degrees C
AW-21	Compliance	E003	11/02/2023	Thallium, total	0.00038 U	mg/L
AW-21	Compliance	E003	11/17/2023	Total Dissolved Solids	690	mg/L
AW-21	Compliance	E003	11/02/2023	Turbidity, field	20.0	NTU

Notes:

- C = Celsius
- cm = centimeter
- mg/L = milligrams per liter
- mV = millivolts
- NTU = Nephelometric Turbidity Units
- pCi/L = picocuries per liter
- SU = Standard Units
- J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J- = The result is an estimated quantity, but the result may be biased low.
- J+ = The result is an estimated quantity, but the result may be biased high.
- U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.
- UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 4, 2023
 845 QUARTERLY REPORT
 EDWARDS POWER PLANT
 ASH POND
 BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
AP07S	PMP	E003	Antimony, total	mg/L	02/10/21 - 11/03/23	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
AP07S	PMP	E003	Arsenic, total	mg/L	02/10/21 - 11/03/23	12	83	CI around median	0.001	0.0300	Background	No Exceedance
AP07S	PMP	E003	Barium, total	mg/L	02/10/21 - 11/03/23	12	0	CI around mean	0.0726	2.07	Background	No Exceedance
AP07S	PMP	E003	Beryllium, total	mg/L	02/10/21 - 11/03/23	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
AP07S	PMP	E003	Boron, total	mg/L	02/10/21 - 11/03/23	12	0	CB around linear reg	5.82	2	Standard	Exceedance
AP07S	PMP	E003	Cadmium, total	mg/L	02/10/21 - 11/03/23	12	83	CI around median	0.001	0.005	Standard	No Exceedance
AP07S	PMP	E003	Chloride, total	mg/L	02/10/21 - 11/03/23	12	0	CI around geomean	75.6	200	Standard	No Exceedance
AP07S	PMP	E003	Chromium, total	mg/L	02/10/21 - 11/03/23	12	67	CI around median	0.004	0.1	Standard	No Exceedance
AP07S	PMP	E003	Cobalt, total	mg/L	02/10/21 - 11/03/23	12	0	CI around mean	0.00238	0.0280	Background	No Exceedance
AP07S	PMP	E003	Fluoride, total	mg/L	02/10/21 - 11/03/23	12	75	CB around T-S line	-1.21	4.0	Standard	No Exceedance
AP07S	PMP	E003	Lead, total	mg/L	02/10/21 - 11/03/23	12	58	CI around median	0.001	0.0330	Background	No Exceedance
AP07S	PMP	E003	Lithium, total	mg/L	02/10/21 - 11/03/23	12	100	All ND - Last	0.02	0.0710	Background	No Exceedance
AP07S	PMP	E003	Mercury, total	mg/L	02/10/21 - 11/03/23	12	92	CI around median	0.0002	0.002	Standard	No Exceedance
AP07S	PMP	E003	Molybdenum, total	mg/L	02/10/21 - 11/03/23	12	42	CI around median	0.001	0.1	Standard	No Exceedance
AP07S	PMP	E003	pH (field)	SU	02/10/21 - 11/03/23	12	0	CI around mean	6.5/7.0	6.3/9.0	Background/Standard	No Exceedance
AP07S	PMP	E003	Radium 226 + Radium 228, total	pCi/L	02/10/21 - 11/03/23	12	0	CI around mean	0.585	9.60	Background	No Exceedance
AP07S	PMP	E003	Selenium, total	mg/L	02/10/21 - 11/03/23	12	100	All ND - Last	0.001	0.05	Standard	No Exceedance
AP07S	PMP	E003	Sulfate, total	mg/L	02/10/21 - 11/03/23	12	0	CI around median	160	400	Standard	No Exceedance
AP07S	PMP	E003	Thallium, total	mg/L	02/10/21 - 11/03/23	12	100	All ND - Last	0.001	0.002	Standard	No Exceedance
AP07S	PMP	E003	Total Dissolved Solids	mg/L	02/10/21 - 11/03/23	12	0	CI around mean	771	1,200	Standard	No Exceedance
AW-01	PMP	E003	Antimony, total	mg/L	11/18/22 - 11/06/23	7	100	All ND - Last	0.003	0.006	Standard	No Exceedance
AW-01	PMP	E003	Arsenic, total	mg/L	11/18/22 - 11/06/23	7	0	CI around mean	0.00187	0.0300	Background	No Exceedance
AW-01	PMP	E003	Barium, total	mg/L	11/18/22 - 11/06/23	7	0	CI around mean	0.109	2.07	Background	No Exceedance
AW-01	PMP	E003	Beryllium, total	mg/L	11/18/22 - 11/06/23	7	100	All ND - Last	0.001	0.004	Standard	No Exceedance
AW-01	PMP	E003	Boron, total	mg/L	11/18/22 - 11/06/23	7	0	CI around median	0.072	2	Standard	No Exceedance
AW-01	PMP	E003	Cadmium, total	mg/L	11/18/22 - 11/06/23	7	100	All ND - Last	0.001	0.005	Standard	No Exceedance
AW-01	PMP	E003	Chloride, total	mg/L	11/18/22 - 11/06/23	7	0	CI around median	10	200	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
AW-01	PMP	E003	Chromium, total	mg/L	11/18/22 - 11/06/23	7	71	CI around median	0.004	0.1	Standard	No Exceedance
AW-01	PMP	E003	Cobalt, total	mg/L	11/18/22 - 11/06/23	7	0	CI around mean	0.00296	0.0280	Background	No Exceedance
AW-01	PMP	E003	Fluoride, total	mg/L	11/18/22 - 11/06/23	7	57	CI around median	0.25	4.0	Standard	No Exceedance
AW-01	PMP	E003	Lead, total	mg/L	11/18/22 - 11/06/23	7	71	CI around median	0.001	0.0330	Background	No Exceedance
AW-01	PMP	E003	Lithium, total	mg/L	11/18/22 - 11/06/23	7	100	All ND - Last	0.02	0.0710	Background	No Exceedance
AW-01	PMP	E003	Mercury, total	mg/L	11/18/22 - 11/06/23	7	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
AW-01	PMP	E003	Molybdenum, total	mg/L	11/18/22 - 11/06/23	7	0	CI around mean	0.0024	0.1	Standard	No Exceedance
AW-01	PMP	E003	pH (field)	SU	11/18/22 - 11/06/23	7	0	CI around mean	6.6/7.1	6.3/9.0	Background/Standard	No Exceedance
AW-01	PMP	E003	Radium 226 + Radium 228, total	pCi/L	11/18/22 - 11/06/23	7	0	CI around mean	-0.579	9.60	Background	No Exceedance
AW-01	PMP	E003	Selenium, total	mg/L	11/18/22 - 11/06/23	7	86	CI around median	0.001	0.05	Standard	No Exceedance
AW-01	PMP	E003	Sulfate, total	mg/L	11/18/22 - 11/06/23	7	0	CI around median	41	400	Standard	No Exceedance
AW-01	PMP	E003	Thallium, total	mg/L	11/18/22 - 11/06/23	7	100	All ND - Last	0.001	0.002	Standard	No Exceedance
AW-01	PMP	E003	Total Dissolved Solids	mg/L	11/18/22 - 11/06/23	7	0	CI around geomean	730	1,200	Standard	No Exceedance
AW-05	UA	E003	Antimony, total	mg/L	11/09/15 - 11/06/23	16	94	Most recent sample	0.003	0.006	Standard	No Exceedance
AW-05	UA	E003	Arsenic, total	mg/L	11/09/15 - 11/06/23	16	0	CI around geomean	0.00384	0.0300	Background	No Exceedance
AW-05	UA	E003	Barium, total	mg/L	11/09/15 - 11/06/23	16	0	CI around geomean	0.139	2.07	Background	No Exceedance
AW-05	UA	E003	Beryllium, total	mg/L	11/09/15 - 11/06/23	15	87	CI around median	0.001	0.004	Standard	No Exceedance
AW-05	UA	E003	Boron, total	mg/L	11/09/15 - 11/06/23	17	0	CB around linear reg	2.9	2	Standard	Exceedance
AW-05	UA	E003	Cadmium, total	mg/L	11/09/15 - 11/06/23	16	88	CI around median	0.001	0.005	Standard	No Exceedance
AW-05	UA	E003	Chloride, total	mg/L	11/09/15 - 11/06/23	17	0	CB around linear reg	-148	200	Standard	No Exceedance
AW-05	UA	E003	Chromium, total	mg/L	11/09/15 - 11/06/23	16	31	CI around geomean	0.00561	0.1	Standard	No Exceedance
AW-05	UA	E003	Cobalt, total	mg/L	11/09/15 - 11/06/23	16	19	CI around geomean	0.00345	0.0280	Background	No Exceedance
AW-05	UA	E003	Fluoride, total	mg/L	11/09/15 - 11/06/23	17	53	CI around median	0.25	4.0	Standard	No Exceedance
AW-05	UA	E003	Lead, total	mg/L	11/09/15 - 11/06/23	15	33	CI around geomean	0.00168	0.0330	Background	No Exceedance
AW-05	UA	E003	Lithium, total	mg/L	11/09/15 - 11/06/23	16	31	CI around geomean	0.0208	0.0710	Background	No Exceedance
AW-05	UA	E003	Mercury, total	mg/L	11/09/15 - 11/06/23	16	94	CI around median	0.0002	0.002	Standard	No Exceedance
AW-05	UA	E003	Molybdenum, total	mg/L	11/09/15 - 11/06/23	16	0	CI around mean	0.00207	0.1	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
AW-05	UA	E003	pH (field)	SU	11/09/15 - 11/06/23	17	0	CI around mean	6.9/7.1	6.3/9.0	Background/Standard	No Exceedance
AW-05	UA	E003	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 11/06/23	16	0	CI around mean	0.65	9.60	Background	No Exceedance
AW-05	UA	E003	Selenium, total	mg/L	11/09/15 - 11/06/23	16	50	CI around median	0.001	0.05	Standard	No Exceedance
AW-05	UA	E003	Sulfate, total	mg/L	11/09/15 - 11/06/23	17	0	CI around median	270	400	Standard	No Exceedance
AW-05	UA	E003	Thallium, total	mg/L	11/09/15 - 11/06/23	15	100	All ND - Last	0.001	0.002	Standard	No Exceedance
AW-05	UA	E003	Total Dissolved Solids	mg/L	11/09/15 - 11/06/23	17	0	CI around mean	1,030	1,200	Standard	No Exceedance
AW-06	UA	E003	Antimony, total	mg/L	11/10/15 - 11/06/23	17	100	All ND - Last	0.003	0.006	Standard	No Exceedance
AW-06	UA	E003	Arsenic, total	mg/L	11/10/15 - 11/06/23	22	0	CI around geomean	0.00301	0.0300	Background	No Exceedance
AW-06	UA	E003	Barium, total	mg/L	11/10/15 - 11/06/23	22	0	CI around median	0.18	2.07	Background	No Exceedance
AW-06	UA	E003	Beryllium, total	mg/L	11/10/15 - 11/06/23	22	86	CI around median	0.001	0.004	Standard	No Exceedance
AW-06	UA	E003	Boron, total	mg/L	11/10/15 - 11/06/23	23	0	CB around linear reg	0.0576	2	Standard	No Exceedance
AW-06	UA	E003	Cadmium, total	mg/L	11/10/15 - 11/06/23	17	100	All ND - Last	0.001	0.005	Standard	No Exceedance
AW-06	UA	E003	Chloride, total	mg/L	11/10/15 - 11/06/23	23	0	CB around T-S line	6.7	200	Standard	No Exceedance
AW-06	UA	E003	Chromium, total	mg/L	11/10/15 - 11/06/23	22	54	CI around median	0.004	0.1	Standard	No Exceedance
AW-06	UA	E003	Cobalt, total	mg/L	11/10/15 - 11/06/23	22	59	CI around median	0.002	0.0280	Background	No Exceedance
AW-06	UA	E003	Fluoride, total	mg/L	11/10/15 - 11/06/23	23	9	CB around T-S line	0.201	4.0	Standard	No Exceedance
AW-06	UA	E003	Lead, total	mg/L	11/10/15 - 11/06/23	22	36	CI around median	0.001	0.0330	Background	No Exceedance
AW-06	UA	E003	Lithium, total	mg/L	11/10/15 - 11/06/23	22	46	CI around geomean	0.0129	0.0710	Background	No Exceedance
AW-06	UA	E003	Mercury, total	mg/L	11/10/15 - 11/06/23	17	94	CI around median	0.0002	0.002	Standard	No Exceedance
AW-06	UA	E003	Molybdenum, total	mg/L	11/10/15 - 11/06/23	22	0	CI around mean	0.0048	0.1	Standard	No Exceedance
AW-06	UA	E003	pH (field)	SU	11/10/15 - 11/06/23	23	0	CI around median	7.1/7.3	6.3/9.0	Background/Standard	No Exceedance
AW-06	UA	E003	Radium 226 + Radium 228, total	pCi/L	11/10/15 - 11/06/23	22	0	CI around mean	0.684	9.60	Background	No Exceedance
AW-06	UA	E003	Selenium, total	mg/L	11/10/15 - 11/06/23	22	73	CI around median	0.001	0.05	Standard	No Exceedance
AW-06	UA	E003	Sulfate, total	mg/L	11/10/15 - 11/06/23	23	0	CB around linear reg	17.6	400	Standard	No Exceedance
AW-06	UA	E003	Thallium, total	mg/L	11/10/15 - 11/06/23	17	100	All ND - Last	0.001	0.002	Standard	No Exceedance
AW-06	UA	E003	Total Dissolved Solids	mg/L	11/10/15 - 11/06/23	23	0	CI around mean	510	1,200	Standard	No Exceedance
AW-09	UA	E003	Antimony, total	mg/L	11/10/15 - 11/06/23	17	100	All ND - Last	0.003	0.006	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 4, 2023
 845 QUARTERLY REPORT
 EDWARDS POWER PLANT
 ASH POND
 BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
AW-09	UA	E003	Arsenic, total	mg/L	11/10/15 - 11/06/23	22	14	CI around mean	0.0107	0.0300	Background	No Exceedance
AW-09	UA	E003	Barium, total	mg/L	11/10/15 - 11/06/23	22	0	CI around geomean	0.284	2.07	Background	No Exceedance
AW-09	UA	E003	Beryllium, total	mg/L	11/10/15 - 11/06/23	22	82	CB around T-S line	-0.000407	0.004	Standard	No Exceedance
AW-09	UA	E003	Boron, total	mg/L	11/10/15 - 11/06/23	23	0	CB around linear reg	-0.12	2	Standard	No Exceedance
AW-09	UA	E003	Cadmium, total	mg/L	11/10/15 - 11/06/23	17	88	CI around median	0.001	0.005	Standard	No Exceedance
AW-09	UA	E003	Chloride, total	mg/L	11/10/15 - 11/06/23	23	0	CI around median	27	200	Standard	No Exceedance
AW-09	UA	E003	Chromium, total	mg/L	11/10/15 - 11/06/23	22	54	CB around T-S line	-0.0517	0.1	Standard	No Exceedance
AW-09	UA	E003	Cobalt, total	mg/L	11/10/15 - 11/06/23	22	4	CB around T-S line	-0.0282	0.0280	Background	No Exceedance
AW-09	UA	E003	Fluoride, total	mg/L	11/10/15 - 11/06/23	23	61	CB around T-S line	0.181	4.0	Standard	No Exceedance
AW-09	UA	E003	Lead, total	mg/L	11/10/15 - 11/06/23	22	41	CI around median	0.001	0.0330	Background	No Exceedance
AW-09	UA	E003	Lithium, total	mg/L	11/10/15 - 11/06/23	22	32	CB around T-S line	-0.0543	0.0710	Background	No Exceedance
AW-09	UA	E003	Mercury, total	mg/L	11/10/15 - 11/06/23	17	94	CI around median	0.0002	0.002	Standard	No Exceedance
AW-09	UA	E003	Molybdenum, total	mg/L	11/10/15 - 11/06/23	22	0	CI around mean	0.0141	0.1	Standard	No Exceedance
AW-09	UA	E003	pH (field)	SU	11/10/15 - 11/06/23	23	0	CB around linear reg	6.9/7.2	6.3/9.0	Background/Standard	No Exceedance
AW-09	UA	E003	Radium 226 + Radium 228, total	pCi/L	11/10/15 - 11/06/23	22	0	CI around median	0.729	9.60	Background	No Exceedance
AW-09	UA	E003	Selenium, total	mg/L	11/10/15 - 11/06/23	22	64	CB around T-S line	-0.00174	0.05	Standard	No Exceedance
AW-09	UA	E003	Sulfate, total	mg/L	11/10/15 - 11/06/23	23	52	CB around T-S line	-23.8	400	Standard	No Exceedance
AW-09	UA	E003	Thallium, total	mg/L	11/10/15 - 11/06/23	17	94	CI around median	0.001	0.002	Standard	No Exceedance
AW-09	UA	E003	Total Dissolved Solids	mg/L	11/10/15 - 11/06/23	23	0	CB around T-S line	748	1,200	Standard	No Exceedance
AW-10	UA	E003	Antimony, total	mg/L	11/09/15 - 11/06/23	18	100	All ND - Last	0.003	0.006	Standard	No Exceedance
AW-10	UA	E003	Arsenic, total	mg/L	11/09/15 - 11/06/23	23	0	CI around median	0.0099	0.0300	Background	No Exceedance
AW-10	UA	E003	Barium, total	mg/L	11/09/15 - 11/06/23	23	0	CI around median	0.98	2.07	Background	No Exceedance
AW-10	UA	E003	Beryllium, total	mg/L	11/09/15 - 11/06/23	23	74	CI around median	0.001	0.004	Standard	No Exceedance
AW-10	UA	E003	Boron, total	mg/L	11/09/15 - 11/06/23	24	0	CI around mean	0.462	2	Standard	No Exceedance
AW-10	UA	E003	Cadmium, total	mg/L	11/09/15 - 11/06/23	18	94	CI around median	0.001	0.005	Standard	No Exceedance
AW-10	UA	E003	Chloride, total	mg/L	11/09/15 - 11/06/23	24	0	CI around geomean	87	200	Standard	No Exceedance
AW-10	UA	E003	Chromium, total	mg/L	11/09/15 - 11/06/23	23	35	CI around median	0.004	0.1	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
AW-10	UA	E003	Cobalt, total	mg/L	11/09/15 - 11/06/23	23	4	CI around geomean	0.00376	0.0280	Background	No Exceedance
AW-10	UA	E003	Fluoride, total	mg/L	11/09/15 - 11/06/23	24	96	CI around median	0.25	4.0	Standard	No Exceedance
AW-10	UA	E003	Lead, total	mg/L	11/09/15 - 11/06/23	23	13	CI around geomean	0.00199	0.0330	Background	No Exceedance
AW-10	UA	E003	Lithium, total	mg/L	11/09/15 - 11/06/23	23	0	CB around T-S line	-0.0149	0.0710	Background	No Exceedance
AW-10	UA	E003	Mercury, total	mg/L	11/09/15 - 11/06/23	18	94	CI around median	0.0002	0.002	Standard	No Exceedance
AW-10	UA	E003	Molybdenum, total	mg/L	11/09/15 - 11/06/23	23	26	CB around T-S line	-0.000377	0.1	Standard	No Exceedance
AW-10	UA	E003	pH (field)	SU	11/09/15 - 11/06/23	25	0	CI around mean	6.9/7.1	6.3/9.0	Background/Standard	No Exceedance
AW-10	UA	E003	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 11/06/23	23	0	CI around mean	2.33	9.60	Background	No Exceedance
AW-10	UA	E003	Selenium, total	mg/L	11/09/15 - 11/06/23	23	61	CI around median	0.001	0.05	Standard	No Exceedance
AW-10	UA	E003	Sulfate, total	mg/L	11/09/15 - 11/06/23	24	79	CB around T-S line	0.764	400	Standard	No Exceedance
AW-10	UA	E003	Thallium, total	mg/L	11/09/15 - 11/06/23	18	94	CI around median	0.001	0.002	Standard	No Exceedance
AW-10	UA	E003	Total Dissolved Solids	mg/L	11/09/15 - 11/06/23	24	0	CI around median	1,100	1,200	Standard	No Exceedance
AW-11	UA	E003	Antimony, total	mg/L	11/09/15 - 11/03/23	17	100	All ND - Last	0.003	0.006	Standard	No Exceedance
AW-11	UA	E003	Arsenic, total	mg/L	11/09/15 - 11/03/23	22	0	CI around geomean	0.00905	0.0300	Background	No Exceedance
AW-11	UA	E003	Barium, total	mg/L	11/09/15 - 11/03/23	22	0	CI around geomean	0.869	2.07	Background	No Exceedance
AW-11	UA	E003	Beryllium, total	mg/L	11/09/15 - 11/03/23	22	77	CI around median	0.001	0.004	Standard	No Exceedance
AW-11	UA	E003	Boron, total	mg/L	11/09/15 - 11/03/23	23	0	CI around mean	0.221	2	Standard	No Exceedance
AW-11	UA	E003	Cadmium, total	mg/L	11/09/15 - 11/03/23	17	82	CI around median	0.001	0.005	Standard	No Exceedance
AW-11	UA	E003	Chloride, total	mg/L	11/09/15 - 11/03/23	23	0	CI around mean	31.2	200	Standard	No Exceedance
AW-11	UA	E003	Chromium, total	mg/L	11/09/15 - 11/03/23	22	50	CB around T-S line	-0.0209	0.1	Standard	No Exceedance
AW-11	UA	E003	Cobalt, total	mg/L	11/09/15 - 11/03/23	22	27	CB around T-S line	-0.00781	0.0280	Background	No Exceedance
AW-11	UA	E003	Fluoride, total	mg/L	11/09/15 - 11/03/23	23	87	CI around median	0.25	4.0	Standard	No Exceedance
AW-11	UA	E003	Lead, total	mg/L	11/09/15 - 11/03/23	22	41	CB around T-S line	-0.0118	0.0330	Background	No Exceedance
AW-11	UA	E003	Lithium, total	mg/L	11/09/15 - 11/03/23	22	18	CB around T-S line	-0.0161	0.0710	Background	No Exceedance
AW-11	UA	E003	Mercury, total	mg/L	11/09/15 - 11/03/23	17	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
AW-11	UA	E003	Molybdenum, total	mg/L	11/09/15 - 11/03/23	22	4	CB around linear reg	-0.00122	0.1	Standard	No Exceedance
AW-11	UA	E003	pH (field)	SU	11/09/15 - 11/03/23	23	0	CI around median	6.9/7.2	6.3/9.0	Background/Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
AW-11	UA	E003	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 11/03/23	22	0	CI around geomean	1.52	9.60	Background	No Exceedance
AW-11	UA	E003	Selenium, total	mg/L	11/09/15 - 11/03/23	22	68	CB around T-S line	-3.86e-05	0.05	Standard	No Exceedance
AW-11	UA	E003	Sulfate, total	mg/L	11/09/15 - 11/03/23	23	65	CB around T-S line	0.0465	400	Standard	No Exceedance
AW-11	UA	E003	Thallium, total	mg/L	11/09/15 - 11/03/23	17	100	All ND - Last	0.001	0.002	Standard	No Exceedance
AW-11	UA	E003	Total Dissolved Solids	mg/L	11/09/15 - 11/03/23	23	0	CB around T-S line	942	1,200	Standard	No Exceedance
AW-14	UA	E003	Antimony, total	mg/L	02/11/21 - 11/03/23	11	91	CI around median	0.003	0.006	Standard	No Exceedance
AW-14	UA	E003	Arsenic, total	mg/L	02/11/21 - 11/03/23	11	0	CI around mean	0.00634	0.0300	Background	No Exceedance
AW-14	UA	E003	Barium, total	mg/L	02/11/21 - 11/03/23	11	0	CB around linear reg	0.721	2.07	Background	No Exceedance
AW-14	UA	E003	Beryllium, total	mg/L	02/11/21 - 11/03/23	11	100	All ND - Last	0.001	0.004	Standard	No Exceedance
AW-14	UA	E003	Boron, total	mg/L	02/11/21 - 11/03/23	11	0	CI around geomean	0.171	2	Standard	No Exceedance
AW-14	UA	E003	Cadmium, total	mg/L	02/11/21 - 11/03/23	11	100	All ND - Last	0.001	0.005	Standard	No Exceedance
AW-14	UA	E003	Chloride, total	mg/L	02/11/21 - 11/03/23	11	0	CI around geomean	23	200	Standard	No Exceedance
AW-14	UA	E003	Chromium, total	mg/L	02/11/21 - 11/03/23	11	91	CI around median	0.004	0.1	Standard	No Exceedance
AW-14	UA	E003	Cobalt, total	mg/L	02/11/21 - 11/03/23	11	18	CB around linear reg	-0.00242	0.0280	Background	No Exceedance
AW-14	UA	E003	Fluoride, total	mg/L	02/11/21 - 11/03/23	11	82	CI around median	0.25	4.0	Standard	No Exceedance
AW-14	UA	E003	Lead, total	mg/L	02/11/21 - 11/03/23	11	73	CI around median	0.001	0.0330	Background	No Exceedance
AW-14	UA	E003	Lithium, total	mg/L	02/11/21 - 11/03/23	11	54	CI around median	0.02	0.0710	Background	No Exceedance
AW-14	UA	E003	Mercury, total	mg/L	02/11/21 - 11/03/23	11	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
AW-14	UA	E003	Molybdenum, total	mg/L	02/11/21 - 11/03/23	11	27	CI around geomean	0.00131	0.1	Standard	No Exceedance
AW-14	UA	E003	pH (field)	SU	02/11/21 - 11/03/23	11	0	CI around mean	6.8/7.0	6.3/9.0	Background/Standard	No Exceedance
AW-14	UA	E003	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 11/03/23	11	0	CI around mean	1.9	9.60	Background	No Exceedance
AW-14	UA	E003	Selenium, total	mg/L	02/11/21 - 11/03/23	11	91	CI around median	0.001	0.05	Standard	No Exceedance
AW-14	UA	E003	Sulfate, total	mg/L	02/11/21 - 11/03/23	11	18	CI around geomean	1.59	400	Standard	No Exceedance
AW-14	UA	E003	Thallium, total	mg/L	02/11/21 - 11/03/23	11	100	All ND - Last	0.001	0.002	Standard	No Exceedance
AW-14	UA	E003	Total Dissolved Solids	mg/L	02/11/21 - 11/03/23	11	0	CI around mean	911	1,200	Standard	No Exceedance
AW-15	UA	E003	Antimony, total	mg/L	02/12/21 - 11/02/23	9	100	All ND - Last	0.003	0.006	Standard	No Exceedance
AW-15	UA	E003	Arsenic, total	mg/L	02/12/21 - 11/02/23	9	0	CI around mean	0.00172	0.0300	Background	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 4, 2023
 845 QUARTERLY REPORT
 EDWARDS POWER PLANT
 ASH POND
 BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
AW-15	UA	E003	Barium, total	mg/L	02/12/21 - 11/02/23	9	0	CI around mean	1.63	2.07	Background	No Exceedance
AW-15	UA	E003	Beryllium, total	mg/L	02/12/21 - 11/02/23	9	100	All ND - Last	0.001	0.004	Standard	No Exceedance
AW-15	UA	E003	Boron, total	mg/L	02/12/21 - 11/02/23	9	0	CI around mean	0.336	2	Standard	No Exceedance
AW-15	UA	E003	Cadmium, total	mg/L	02/12/21 - 11/02/23	9	100	All ND - Last	0.001	0.005	Standard	No Exceedance
AW-15	UA	E003	Chloride, total	mg/L	02/12/21 - 11/02/23	9	0	CB around linear reg	24.2	200	Standard	No Exceedance
AW-15	UA	E003	Chromium, total	mg/L	02/12/21 - 11/02/23	9	100	All ND - Last	0.004	0.1	Standard	No Exceedance
AW-15	UA	E003	Cobalt, total	mg/L	02/12/21 - 11/02/23	9	89	CI around median	0.002	0.0280	Background	No Exceedance
AW-15	UA	E003	Fluoride, total	mg/L	02/12/21 - 11/02/23	9	78	CI around median	0.25	4.0	Standard	No Exceedance
AW-15	UA	E003	Lead, total	mg/L	02/12/21 - 11/02/23	9	100	All ND - Last	0.001	0.0330	Background	No Exceedance
AW-15	UA	E003	Lithium, total	mg/L	02/12/21 - 11/02/23	9	0	CI around mean	0.0279	0.0710	Background	No Exceedance
AW-15	UA	E003	Mercury, total	mg/L	02/12/21 - 11/02/23	9	89	CI around median	0.0002	0.002	Standard	No Exceedance
AW-15	UA	E003	Molybdenum, total	mg/L	02/12/21 - 11/02/23	9	78	CI around median	0.001	0.1	Standard	No Exceedance
AW-15	UA	E003	pH (field)	SU	02/12/21 - 11/02/23	8	0	CI around mean	6.6/6.9	6.3/9.0	Background/Standard	No Exceedance
AW-15	UA	E003	Radium 226 + Radium 228, total	pCi/L	02/12/21 - 11/02/23	9	0	CI around mean	2.97	9.60	Background	No Exceedance
AW-15	UA	E003	Selenium, total	mg/L	02/12/21 - 11/02/23	9	100	All ND - Last	0.001	0.05	Standard	No Exceedance
AW-15	UA	E003	Sulfate, total	mg/L	02/12/21 - 11/02/23	9	89	Most recent sample	1	400	Standard	No Exceedance
AW-15	UA	E003	Thallium, total	mg/L	02/12/21 - 11/02/23	9	100	All ND - Last	0.001	0.002	Standard	No Exceedance
AW-15	UA	E003	Total Dissolved Solids	mg/L	02/12/21 - 11/17/23	9	0	CI around mean	891	1,200	Standard	No Exceedance
AW-15S	PMP	E003	Antimony, total	mg/L	02/12/21 - 11/02/23	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
AW-15S	PMP	E003	Arsenic, total	mg/L	02/12/21 - 11/02/23	12	58	CI around median	0.001	0.0300	Background	No Exceedance
AW-15S	PMP	E003	Barium, total	mg/L	02/12/21 - 11/02/23	12	0	CB around T-S line	-0.0761	2.07	Background	No Exceedance
AW-15S	PMP	E003	Beryllium, total	mg/L	02/12/21 - 11/02/23	12	92	CI around median	0.001	0.004	Standard	No Exceedance
AW-15S	PMP	E003	Boron, total	mg/L	02/12/21 - 11/02/23	12	0	CI around mean	5.51	2	Standard	Exceedance
AW-15S	PMP	E003	Cadmium, total	mg/L	02/12/21 - 11/02/23	12	100	All ND - Last	0.001	0.005	Standard	No Exceedance
AW-15S	PMP	E003	Chloride, total	mg/L	02/12/21 - 11/02/23	12	0	CB around linear reg	21.8	200	Standard	No Exceedance
AW-15S	PMP	E003	Chromium, total	mg/L	02/12/21 - 11/02/23	12	92	CI around median	0.004	0.1	Standard	No Exceedance
AW-15S	PMP	E003	Cobalt, total	mg/L	02/12/21 - 11/02/23	12	92	CI around median	0.002	0.0280	Background	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
AW-15S	PMP	E003	Fluoride, total	mg/L	02/12/21 - 11/02/23	12	33	CI around median	0.25	4.0	Standard	No Exceedance
AW-15S	PMP	E003	Lead, total	mg/L	02/12/21 - 11/02/23	12	83	CI around median	0.001	0.0330	Background	No Exceedance
AW-15S	PMP	E003	Lithium, total	mg/L	02/12/21 - 11/02/23	12	83	CI around median	0.02	0.0710	Background	No Exceedance
AW-15S	PMP	E003	Mercury, total	mg/L	02/12/21 - 11/02/23	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
AW-15S	PMP	E003	Molybdenum, total	mg/L	02/12/21 - 11/02/23	12	0	CB around linear reg	0.00218	0.1	Standard	No Exceedance
AW-15S	PMP	E003	pH (field)	SU	02/12/21 - 11/02/23	12	0	CI around mean	6.7/7.0	6.3/9.0	Background/Standard	No Exceedance
AW-15S	PMP	E003	Selenium, total	mg/L	02/12/21 - 11/02/23	12	42	CI around median	0.001	0.05	Standard	No Exceedance
AW-15S	PMP	E003	Sulfate, total	mg/L	02/12/21 - 11/02/23	12	0	CB around linear reg	510	400	Standard	Exceedance
AW-15S	PMP	E003	Thallium, total	mg/L	02/12/21 - 11/02/23	12	100	All ND - Last	0.001	0.002	Standard	No Exceedance
AW-15S	PMP	E003	Total Dissolved Solids	mg/L	02/12/21 - 11/17/23	12	0	CI around mean	1,180	1,200	Standard	No Exceedance
AW-16	UA	E003	Antimony, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
AW-16	UA	E003	Arsenic, total	mg/L	02/11/21 - 11/02/23	12	17	CI around mean	0.00119	0.0300	Background	No Exceedance
AW-16	UA	E003	Barium, total	mg/L	02/11/21 - 11/02/23	12	0	CI around mean	1.16	2.07	Background	No Exceedance
AW-16	UA	E003	Beryllium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
AW-16	UA	E003	Boron, total	mg/L	02/11/21 - 11/02/23	12	0	CI around mean	0.458	2	Standard	No Exceedance
AW-16	UA	E003	Cadmium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.005	Standard	No Exceedance
AW-16	UA	E003	Chloride, total	mg/L	02/11/21 - 11/02/23	12	0	CI around mean	49.4	200	Standard	No Exceedance
AW-16	UA	E003	Chromium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.004	0.1	Standard	No Exceedance
AW-16	UA	E003	Cobalt, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.002	0.0280	Background	No Exceedance
AW-16	UA	E003	Fluoride, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.25	4.0	Standard	No Exceedance
AW-16	UA	E003	Lead, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.0330	Background	No Exceedance
AW-16	UA	E003	Lithium, total	mg/L	02/11/21 - 11/02/23	12	0	CB around T-S line	0.00737	0.0710	Background	No Exceedance
AW-16	UA	E003	Mercury, total	mg/L	02/11/21 - 11/02/23	12	92	CI around median	0.0002	0.002	Standard	No Exceedance
AW-16	UA	E003	Molybdenum, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.1	Standard	No Exceedance
AW-16	UA	E003	pH (field)	SU	02/11/21 - 11/02/23	12	0	CI around mean	6.6/6.9	6.3/9.0	Background/Standard	No Exceedance
AW-16	UA	E003	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 11/02/23	12	0	CB around linear reg	1.74	9.60	Background	No Exceedance
AW-16	UA	E003	Selenium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.05	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 4, 2023
 845 QUARTERLY REPORT
 EDWARDS POWER PLANT
 ASH POND
 BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
AW-16	UA	E003	Sulfate, total	mg/L	02/11/21 - 11/02/23	12	92	CI around median	1	400	Standard	No Exceedance
AW-16	UA	E003	Thallium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.002	Standard	No Exceedance
AW-16	UA	E003	Total Dissolved Solids	mg/L	02/11/21 - 11/17/23	12	0	CI around mean	1,060	1,200	Standard	No Exceedance
AW-17	UA	E003	Antimony, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
AW-17	UA	E003	Arsenic, total	mg/L	02/11/21 - 11/01/23	12	0	CB around linear reg	0.00223	0.0300	Background	No Exceedance
AW-17	UA	E003	Barium, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	1.03	2.07	Background	No Exceedance
AW-17	UA	E003	Beryllium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
AW-17	UA	E003	Boron, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	0.413	2	Standard	No Exceedance
AW-17	UA	E003	Cadmium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.005	Standard	No Exceedance
AW-17	UA	E003	Chloride, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	52.1	200	Standard	No Exceedance
AW-17	UA	E003	Chromium, total	mg/L	02/11/21 - 11/01/23	12	67	CI around median	0.004	0.1	Standard	No Exceedance
AW-17	UA	E003	Cobalt, total	mg/L	02/11/21 - 11/01/23	12	0	CI around median	0.0022	0.0280	Background	No Exceedance
AW-17	UA	E003	Fluoride, total	mg/L	02/11/21 - 11/01/23	12	92	CI around median	0.25	4.0	Standard	No Exceedance
AW-17	UA	E003	Lead, total	mg/L	02/11/21 - 11/01/23	12	67	CI around median	0.001	0.0330	Background	No Exceedance
AW-17	UA	E003	Lithium, total	mg/L	02/11/21 - 11/01/23	12	0	CB around linear reg	0.000638	0.0710	Background	No Exceedance
AW-17	UA	E003	Mercury, total	mg/L	02/11/21 - 11/01/23	12	92	CI around median	0.0002	0.002	Standard	No Exceedance
AW-17	UA	E003	Molybdenum, total	mg/L	02/11/21 - 11/01/23	12	42	CB around linear reg	-9.68e-05	0.1	Standard	No Exceedance
AW-17	UA	E003	pH (field)	SU	02/11/21 - 11/01/23	12	0	CI around median	6.6/7.0	6.3/9.0	Background/Standard	No Exceedance
AW-17	UA	E003	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 11/01/23	12	0	CI around mean	2.61	9.60	Background	No Exceedance
AW-17	UA	E003	Selenium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.05	Standard	No Exceedance
AW-17	UA	E003	Sulfate, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	1	400	Standard	No Exceedance
AW-17	UA	E003	Thallium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.002	Standard	No Exceedance
AW-17	UA	E003	Total Dissolved Solids	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	828	1,200	Standard	No Exceedance
AW-18	UA	E003	Antimony, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
AW-18	UA	E003	Arsenic, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	0.0033	0.0300	Background	No Exceedance
AW-18	UA	E003	Barium, total	mg/L	02/11/21 - 11/01/23	12	0	CB around linear reg	1.1	2.07	Background	No Exceedance
AW-18	UA	E003	Beryllium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 4, 2023
 845 QUARTERLY REPORT
 EDWARDS POWER PLANT
 ASH POND
 BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
AW-18	UA	E003	Boron, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	0.623	2	Standard	No Exceedance
AW-18	UA	E003	Cadmium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.005	Standard	No Exceedance
AW-18	UA	E003	Chloride, total	mg/L	02/11/21 - 11/01/23	12	0	CB around linear reg	79.5	200	Standard	No Exceedance
AW-18	UA	E003	Chromium, total	mg/L	02/11/21 - 11/01/23	12	92	CI around median	0.004	0.1	Standard	No Exceedance
AW-18	UA	E003	Cobalt, total	mg/L	02/11/21 - 11/01/23	12	75	CI around median	0.002	0.0280	Background	No Exceedance
AW-18	UA	E003	Fluoride, total	mg/L	02/11/21 - 11/01/23	12	50	CI around median	0.25	4.0	Standard	No Exceedance
AW-18	UA	E003	Lead, total	mg/L	02/11/21 - 11/01/23	12	75	CI around median	0.001	0.0330	Background	No Exceedance
AW-18	UA	E003	Lithium, total	mg/L	02/11/21 - 11/01/23	12	0	CB around linear reg	-0.0246	0.0710	Background	No Exceedance
AW-18	UA	E003	Mercury, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
AW-18	UA	E003	Molybdenum, total	mg/L	02/11/21 - 11/01/23	12	0	CB around linear reg	-0.0127	0.1	Standard	No Exceedance
AW-18	UA	E003	pH (field)	SU	02/11/21 - 11/01/23	12	0	CI around mean	6.7/7.0	6.3/9.0	Background/Standard	No Exceedance
AW-18	UA	E003	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 11/01/23	12	0	CI around mean	2.27	9.60	Background	No Exceedance
AW-18	UA	E003	Selenium, total	mg/L	02/11/21 - 11/01/23	12	92	CI around median	0.001	0.05	Standard	No Exceedance
AW-18	UA	E003	Sulfate, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	4.52	400	Standard	No Exceedance
AW-18	UA	E003	Thallium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.002	Standard	No Exceedance
AW-18	UA	E003	Total Dissolved Solids	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	781	1,200	Standard	No Exceedance
AW-19	UA	E003	Antimony, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
AW-19	UA	E003	Arsenic, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	0.0111	0.0300	Background	No Exceedance
AW-19	UA	E003	Barium, total	mg/L	02/11/21 - 11/01/23	12	0	CI around median	0.18	2.07	Background	No Exceedance
AW-19	UA	E003	Beryllium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
AW-19	UA	E003	Boron, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	2.52	2	Standard	Exceedance
AW-19	UA	E003	Cadmium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.005	Standard	No Exceedance
AW-19	UA	E003	Chloride, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	76.8	200	Standard	No Exceedance
AW-19	UA	E003	Chromium, total	mg/L	02/11/21 - 11/01/23	12	75	CI around median	0.004	0.1	Standard	No Exceedance
AW-19	UA	E003	Cobalt, total	mg/L	02/11/21 - 11/01/23	12	75	CI around median	0.002	0.0280	Background	No Exceedance
AW-19	UA	E003	Fluoride, total	mg/L	02/11/21 - 11/01/23	12	8	CB around linear reg	0.116	4.0	Standard	No Exceedance
AW-19	UA	E003	Lead, total	mg/L	02/11/21 - 11/01/23	12	50	CI around median	0.001	0.0330	Background	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
AW-19	UA	E003	Lithium, total	mg/L	02/11/21 - 11/01/23	12	67	CI around median	0.02	0.0710	Background	No Exceedance
AW-19	UA	E003	Mercury, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
AW-19	UA	E003	Molybdenum, total	mg/L	02/11/21 - 11/01/23	12	0	CI around median	0.0034	0.1	Standard	No Exceedance
AW-19	UA	E003	pH (field)	SU	02/11/21 - 11/01/23	12	0	CI around mean	6.7/7.1	6.3/9.0	Background/Standard	No Exceedance
AW-19	UA	E003	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 11/01/23	12	0	CI around mean	0.421	9.60	Background	No Exceedance
AW-19	UA	E003	Selenium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.05	Standard	No Exceedance
AW-19	UA	E003	Sulfate, total	mg/L	02/11/21 - 11/01/23	12	0	CB around linear reg	51	400	Standard	No Exceedance
AW-19	UA	E003	Thallium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.002	Standard	No Exceedance
AW-19	UA	E003	Total Dissolved Solids	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	553	1,200	Standard	No Exceedance
AW-21	UA	E003	Antimony, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
AW-21	UA	E003	Arsenic, total	mg/L	02/11/21 - 11/02/23	12	25	CI around mean	0.00101	0.0300	Background	No Exceedance
AW-21	UA	E003	Barium, total	mg/L	02/11/21 - 11/02/23	12	0	CB around linear reg	0.0413	2.07	Background	No Exceedance
AW-21	UA	E003	Beryllium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
AW-21	UA	E003	Boron, total	mg/L	02/11/21 - 11/02/23	12	0	CI around median	11	2	Standard	Exceedance
AW-21	UA	E003	Cadmium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.005	Standard	No Exceedance
AW-21	UA	E003	Chloride, total	mg/L	02/11/21 - 11/02/23	12	0	CI around median	83	200	Standard	No Exceedance
AW-21	UA	E003	Chromium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.004	0.1	Standard	No Exceedance
AW-21	UA	E003	Cobalt, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.002	0.0280	Background	No Exceedance
AW-21	UA	E003	Fluoride, total	mg/L	02/11/21 - 11/02/23	12	0	CB around linear reg	0.155	4.0	Standard	No Exceedance
AW-21	UA	E003	Lead, total	mg/L	02/11/21 - 11/02/23	12	92	CI around median	0.001	0.0330	Background	No Exceedance
AW-21	UA	E003	Lithium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.02	0.0710	Background	No Exceedance
AW-21	UA	E003	Mercury, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
AW-21	UA	E003	Molybdenum, total	mg/L	02/11/21 - 11/02/23	12	0	CI around mean	0.0169	0.1	Standard	No Exceedance
AW-21	UA	E003	pH (field)	SU	02/11/21 - 11/02/23	12	0	CI around mean	6.9/7.5	6.3/9.0	Background/Standard	No Exceedance
AW-21	UA	E003	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 11/02/23	12	0	CI around mean	0.428	9.60	Background	No Exceedance
AW-21	UA	E003	Selenium, total	mg/L	02/11/21 - 11/02/23	12	75	CI around median	0.001	0.05	Standard	No Exceedance
AW-21	UA	E003	Sulfate, total	mg/L	02/11/21 - 11/02/23	12	0	CI around median	230	400	Standard	No Exceedance

**TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 4, 2023**

845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
AW-21	UA	E003	Thallium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.002	Standard	No Exceedance
AW-21	UA	E003	Total Dissolved Solids	mg/L	02/11/21 - 11/17/23	12	0	CI around mean	650	1,200	Standard	No Exceedance

Notes:

Compliance Result:

No Exceedance: the statistical result did not exceed the GWPS.

Exceedance: The statistical result exceeded the GWPS.

HSU = hydrostratigraphic unit:

PMP = Potential Migration Pathway

UA = Uppermost Aquifer

mg/L = milligrams per liter

ND = non-detect

pCi/L = picocuries per liter

SU = standard units

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

Statistical Calculation = method used to calculate the statistical result:

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

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

CB around linear reg = Confidence band around linear regression

CI around geomean = Confidence interval around the geometric mean

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

Most recent sample = Result for the most recently collected sample used due to insufficient data

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

For pH, the values presented are the lower / upper limits

GWPS = Groundwater Protection Standard

GWPS Source:

Standard = standard specified in 35 I.A.C. § 845.600(a)(1)

Background = background concentration (see cover page for additional information)

**TABLE 3.
SUPPLEMENTAL FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2023**

845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Event	Date	Parameter	Result	Unit
APW-01	E003	11/06/2023	Antimony, total	0.00043 U	mg/L
APW-01	E003	11/06/2023	Arsenic, total	0.0140	mg/L
APW-01	E003	11/06/2023	Barium, total	0.0850	mg/L
APW-01	E003	11/06/2023	Beryllium, total	0.00059 U	mg/L
APW-01	E003	11/06/2023	Boron, total	1.10	mg/L
APW-01	E003	11/06/2023	Cadmium, total	0.00074 U	mg/L
APW-01	E003	11/06/2023	Calcium, total	170	mg/L
APW-01	E003	11/06/2023	Chloride, total	120	mg/L
APW-01	E003	11/06/2023	Chromium, total	0.00600	mg/L
APW-01	E003	11/06/2023	Cobalt, total	0.00310	mg/L
APW-01	E003	11/06/2023	Dissolved Oxygen	2.70	mg/L
APW-01	E003	11/06/2023	Fluoride, total	0.147 J	mg/L
APW-01	E003	11/06/2023	Lead, total	0.00380 J+	mg/L
APW-01	E003	11/06/2023	Lithium, total	0.012 J	mg/L
APW-01	E003	11/06/2023	Mercury, total	0.00014 U	mg/L
APW-01	E003	11/06/2023	Molybdenum, total	0.00190	mg/L
APW-01	E003	11/06/2023	Oxidation Reduction Potential	-97.0	mV
APW-01	E003	11/06/2023	pH (field)	6.9	SU
APW-01	E003	11/06/2023	Radium 226 + Radium 228, total	3.70 J+	pCi/L
APW-01	E003	11/06/2023	Selenium, total	0.00062 J	mg/L
APW-01	E003	11/06/2023	Specific Conductance @ 25C (field)	1,420	micromhos/cm
APW-01	E003	11/06/2023	Sulfate, total	290	mg/L
APW-01	E003	11/06/2023	Temperature	16.2	degrees C
APW-01	E003	11/06/2023	Thallium, total	0.00038 U	mg/L
APW-01	E003	11/06/2023	Total Dissolved Solids	980	mg/L
APW-01	E003	11/06/2023	Turbidity, field	490	NTU
AW-20	E003	11/01/2023	Antimony, total	0.00043 U	mg/L
AW-20	E003	11/01/2023	Arsenic, total	0.0120	mg/L
AW-20	E003	11/01/2023	Barium, total	0.140	mg/L
AW-20	E003	11/01/2023	Beryllium, total	0.00059 U	mg/L
AW-20	E003	11/01/2023	Boron, total	3.10	mg/L
AW-20	E003	11/01/2023	Cadmium, total	0.00074 U	mg/L
AW-20	E003	11/01/2023	Calcium, total	150	mg/L
AW-20	E003	11/01/2023	Chloride, total	87.0	mg/L
AW-20	E003	11/01/2023	Chromium, total	0.0028 U	mg/L
AW-20	E003	11/01/2023	Cobalt, total	0.0019 J	mg/L
AW-20	E003	11/01/2023	Dissolved Oxygen	0.800	mg/L
AW-20	E003	11/01/2023	Fluoride, total	0.204 J	mg/L
AW-20	E003	11/01/2023	Lead, total	0.00130 J+	mg/L
AW-20	E003	11/01/2023	Lithium, total	0.016 J	mg/L
AW-20	E003	11/01/2023	Mercury, total	0.00014 U	mg/L
AW-20	E003	11/01/2023	Molybdenum, total	0.00230	mg/L
AW-20	E003	11/01/2023	Oxidation Reduction Potential	-77.0	mV
AW-20	E003	11/01/2023	pH (field)	7.0	SU
AW-20	E003	11/01/2023	Radium 226 + Radium 228, total	1.72 J+	pCi/L
AW-20	E003	11/01/2023	Selenium, total	0.00074 U	mg/L

**TABLE 3.
SUPPLEMENTAL FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2023**

845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Event	Date	Parameter	Result	Unit
AW-20	E003	11/01/2023	Specific Conductance @ 25C (field)	1,390	micromhos/cm
AW-20	E003	11/01/2023	Sulfate, total	55.0	mg/L
AW-20	E003	11/01/2023	Temperature	14.4	degrees C
AW-20	E003	11/01/2023	Thallium, total	0.00038 U	mg/L
AW-20	E003	11/01/2023	Total Dissolved Solids	900	mg/L
AW-20	E003	11/01/2023	Turbidity, field	94.2	NTU
AW-23	E003	11/03/2023	Antimony, total	0.00043 U	mg/L
AW-23	E003	11/03/2023	Arsenic, total	0.00250	mg/L
AW-23	E003	11/03/2023	Barium, total	0.310	mg/L
AW-23	E003	11/03/2023	Beryllium, total	0.00110	mg/L
AW-23	E003	11/03/2023	Boron, total	0.600 J+	mg/L
AW-23	E003	11/03/2023	Cadmium, total	0.00074 U	mg/L
AW-23	E003	11/03/2023	Calcium, total	140	mg/L
AW-23	E003	11/03/2023	Chloride, total	35.0	mg/L
AW-23	E003	11/03/2023	Chromium, total	0.0280	mg/L
AW-23	E003	11/03/2023	Cobalt, total	0.0190	mg/L
AW-23	E003	11/03/2023	Dissolved Oxygen	2.10	mg/L
AW-23	E003	11/03/2023	Fluoride, total	0.22 J	mg/L
AW-23	E003	11/03/2023	Lead, total	0.00960	mg/L
AW-23	E003	11/03/2023	Lithium, total	0.0380	mg/L
AW-23	E003	11/03/2023	Mercury, total	0.00014 U	mg/L
AW-23	E003	11/03/2023	Molybdenum, total	0.00098 J	mg/L
AW-23	E003	11/03/2023	Oxidation Reduction Potential	108	mV
AW-23	E003	11/03/2023	pH (field)	6.8	SU
AW-23	E003	11/03/2023	Radium 226 + Radium 228, total	1.85 J+	pCi/L
AW-23	E003	11/03/2023	Selenium, total	0.00096 J	mg/L
AW-23	E003	11/03/2023	Specific Conductance @ 25C (field)	1,090	micromhos/cm
AW-23	E003	11/03/2023	Sulfate, total	180	mg/L
AW-23	E003	11/03/2023	Temperature	15.2	degrees C
AW-23	E003	11/03/2023	Thallium, total	0.00038 U	mg/L
AW-23	E003	11/03/2023	Total Dissolved Solids	720	mg/L
AW-23	E003	11/03/2023	Turbidity, field	1,000	NTU
EMW-05	E003	11/03/2023	Antimony, total	0.00043 U	mg/L
EMW-05	E003	11/03/2023	Arsenic, total	0.00069 U	mg/L
EMW-05	E003	11/03/2023	Barium, total	0.0530	mg/L
EMW-05	E003	11/03/2023	Beryllium, total	0.00059 U	mg/L
EMW-05	E003	11/03/2023	Boron, total	1.50	mg/L
EMW-05	E003	11/03/2023	Cadmium, total	0.00074 U	mg/L
EMW-05	E003	11/03/2023	Calcium, total	180	mg/L
EMW-05	E003	11/03/2023	Chloride, total	20.0	mg/L
EMW-05	E003	11/03/2023	Chromium, total	0.0028 U	mg/L
EMW-05	E003	11/03/2023	Cobalt, total	0.00048 U	mg/L
EMW-05	E003	11/03/2023	Dissolved Oxygen	0.0100	mg/L
EMW-05	E003	11/03/2023	Fluoride, total	0.108 J	mg/L
EMW-05	E003	11/03/2023	Lead, total	0.00022 U	mg/L
EMW-05	E003	11/03/2023	Lithium, total	0.0058 J	mg/L

**TABLE 3.
SUPPLEMENTAL FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2023**

845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Event	Date	Parameter	Result	Unit
EMW-05	E003	11/03/2023	Mercury, total	0.00014 U	mg/L
EMW-05	E003	11/03/2023	Molybdenum, total	0.00100	mg/L
EMW-05	E003	11/03/2023	Oxidation Reduction Potential	27.0	mV
EMW-05	E003	11/03/2023	pH (field)	7.1	SU
EMW-05	E003	11/03/2023	Radium 226 + Radium 228, total	0.519 J+	pCi/L
EMW-05	E003	11/03/2023	Selenium, total	0.00013 U	mg/L
EMW-05	E003	11/03/2023	Specific Conductance @ 25C (field)	1,230	micromhos/cm
EMW-05	E003	11/03/2023	Sulfate, total	130	mg/L
EMW-05	E003	11/03/2023	Temperature	13.0	degrees C
EMW-05	E003	11/03/2023	Thallium, total	0.00038 U	mg/L
EMW-05	E003	11/03/2023	Total Dissolved Solids	860	mg/L
EMW-05	E003	11/03/2023	Turbidity, field	32.8	NTU

Notes:

C = Celsius

cm = centimeter

mg/L = milligrams per liter

mV = millivolts

NTU = Nephelometric Turbidity Units

pCi/L = picocuries per liter

SU = Standard Units

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

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

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

TABLE 4.
SUPPLEMENTAL COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
APW-01	UA	E003	Antimony, total	mg/L	06/17/21 - 11/06/23	6	100	All ND - Last	0.003	0.006	Standard	No Exceedance
APW-01	UA	E003	Arsenic, total	mg/L	06/17/21 - 11/06/23	6	0	CI around mean	0.00521	0.0300	Background	No Exceedance
APW-01	UA	E003	Barium, total	mg/L	06/17/21 - 11/06/23	6	0	CI around mean	0.0443	2.07	Background	No Exceedance
APW-01	UA	E003	Beryllium, total	mg/L	06/17/21 - 11/06/23	6	100	All ND - Last	0.001	0.004	Standard	No Exceedance
APW-01	UA	E003	Boron, total	mg/L	06/17/21 - 11/06/23	6	0	CI around mean	0.651	2	Standard	No Exceedance
APW-01	UA	E003	Cadmium, total	mg/L	06/17/21 - 11/06/23	6	83	CI around median (Last Sample, n<7)	0.001	0.005	Standard	No Exceedance
APW-01	UA	E003	Chloride, total	mg/L	06/17/21 - 11/06/23	6	0	CI around mean	102	200	Standard	No Exceedance
APW-01	UA	E003	Chromium, total	mg/L	06/17/21 - 11/06/23	6	33	CI around mean	0.000859	0.1	Standard	No Exceedance
APW-01	UA	E003	Cobalt, total	mg/L	06/17/21 - 11/06/23	6	33	CI around mean	7.52e-05	0.0280	Background	No Exceedance
APW-01	UA	E003	Fluoride, total	mg/L	06/17/21 - 11/06/23	6	67	CI around median (Last Sample, n<7)	0.25	4.0	Standard	No Exceedance
APW-01	UA	E003	Lead, total	mg/L	06/17/21 - 11/06/23	6	33	CI around mean	-0.00198	0.0330	Background	No Exceedance
APW-01	UA	E003	Lithium, total	mg/L	06/17/21 - 11/06/23	6	67	CI around median (Last Sample, n<7)	0.02	0.0710	Background	No Exceedance
APW-01	UA	E003	Mercury, total	mg/L	06/17/21 - 11/06/23	6	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
APW-01	UA	E003	Molybdenum, total	mg/L	06/17/21 - 11/06/23	6	0	CI around mean	0.0012	0.1	Standard	No Exceedance
APW-01	UA	E003	pH (field)	SU	06/17/21 - 11/06/23	6	0	CI around mean	6.6/7.1	6.3/9.0	Background/Standard	No Exceedance
APW-01	UA	E003	Radium 226 + Radium 228, total	pCi/L	06/17/21 - 11/06/23	5	0	CI around mean	-0.066	9.60	Background	No Exceedance
APW-01	UA	E003	Selenium, total	mg/L	06/17/21 - 11/06/23	6	67	CI around median (Last Sample, n<7)	0.001	0.05	Standard	No Exceedance
APW-01	UA	E003	Sulfate, total	mg/L	06/17/21 - 11/06/23	6	0	CI around mean	282	400	Standard	No Exceedance
APW-01	UA	E003	Thallium, total	mg/L	06/17/21 - 11/06/23	6	100	All ND - Last	0.001	0.002	Standard	No Exceedance
APW-01	UA	E003	Total Dissolved Solids	mg/L	06/17/21 - 11/06/23	6	0	CI around mean	832	1,200	Standard	No Exceedance
AW-20	UA	E003	Antimony, total	mg/L	02/11/21 - 11/01/23	8	100	All ND - Last	0.003	0.006	Standard	No Exceedance
AW-20	UA	E003	Arsenic, total	mg/L	02/11/21 - 11/01/23	8	0	CI around mean	0.0112	0.0300	Background	No Exceedance
AW-20	UA	E003	Barium, total	mg/L	02/11/21 - 11/01/23	8	0	CI around mean	0.13	2.07	Background	No Exceedance
AW-20	UA	E003	Beryllium, total	mg/L	02/11/21 - 11/01/23	8	100	All ND - Last	0.001	0.004	Standard	No Exceedance
AW-20	UA	E003	Boron, total	mg/L	02/11/21 - 11/01/23	8	0	CI around mean	2.04	2	Standard	Exceedance
AW-20	UA	E003	Cadmium, total	mg/L	02/11/21 - 11/01/23	8	100	All ND - Last	0.001	0.005	Standard	No Exceedance
AW-20	UA	E003	Chloride, total	mg/L	02/11/21 - 11/01/23	8	0	CI around mean	86	200	Standard	No Exceedance

TABLE 4.
SUPPLEMENTAL COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
AW-20	UA	E003	Chromium, total	mg/L	02/11/21 - 11/01/23	8	88	CI around median	0.004	0.1	Standard	No Exceedance
AW-20	UA	E003	Cobalt, total	mg/L	02/11/21 - 11/01/23	8	62	CI around median	0.002	0.0280	Background	No Exceedance
AW-20	UA	E003	Fluoride, total	mg/L	02/11/21 - 11/01/23	8	25	CI around mean	0.25	4.0	Standard	No Exceedance
AW-20	UA	E003	Lead, total	mg/L	02/11/21 - 11/01/23	8	62	CI around median	0.001	0.0330	Background	No Exceedance
AW-20	UA	E003	Lithium, total	mg/L	02/11/21 - 11/01/23	8	75	CI around median	0.02	0.0710	Background	No Exceedance
AW-20	UA	E003	Mercury, total	mg/L	02/11/21 - 11/01/23	8	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
AW-20	UA	E003	Molybdenum, total	mg/L	02/11/21 - 11/01/23	8	0	CI around mean	0.0023	0.1	Standard	No Exceedance
AW-20	UA	E003	pH (field)	SU	02/11/21 - 11/01/23	8	0	CI around mean	6.5/7.1	6.3/9.0	Background/Standard	No Exceedance
AW-20	UA	E003	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 11/01/23	7	0	CI around mean	0.381	9.60	Background	No Exceedance
AW-20	UA	E003	Selenium, total	mg/L	02/11/21 - 11/01/23	8	100	All ND - Last	0.001	0.05	Standard	No Exceedance
AW-20	UA	E003	Sulfate, total	mg/L	02/11/21 - 11/01/23	8	0	CI around mean	40.2	400	Standard	No Exceedance
AW-20	UA	E003	Thallium, total	mg/L	02/11/21 - 11/01/23	8	100	All ND - Last	0.001	0.002	Standard	No Exceedance
AW-20	UA	E003	Total Dissolved Solids	mg/L	02/11/21 - 11/01/23	8	0	CI around mean	746	1,200	Standard	No Exceedance
AW-23	UA	E003	Antimony, total	mg/L	11/21/22 - 11/03/23	6	100	All ND - Last	0.003	0.006	Standard	No Exceedance
AW-23	UA	E003	Arsenic, total	mg/L	11/21/22 - 11/03/23	6	67	CI around median (Last Sample, n<7)	0.0025	0.0300	Background	No Exceedance
AW-23	UA	E003	Barium, total	mg/L	11/21/22 - 11/03/23	6	0	CI around median (Last Sample, n<7)	0.31	2.07	Background	No Exceedance
AW-23	UA	E003	Beryllium, total	mg/L	11/21/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.0011	0.004	Standard	No Exceedance
AW-23	UA	E003	Boron, total	mg/L	11/21/22 - 11/03/23	6	0	CI around mean	0.476	2	Standard	No Exceedance
AW-23	UA	E003	Cadmium, total	mg/L	11/21/22 - 11/03/23	6	100	All ND - Last	0.001	0.005	Standard	No Exceedance
AW-23	UA	E003	Chloride, total	mg/L	11/21/22 - 11/03/23	6	0	CI around mean	36.1	200	Standard	No Exceedance
AW-23	UA	E003	Chromium, total	mg/L	11/21/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.028	0.1	Standard	No Exceedance
AW-23	UA	E003	Cobalt, total	mg/L	11/21/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.019	0.0280	Background	No Exceedance
AW-23	UA	E003	Fluoride, total	mg/L	11/21/22 - 11/03/23	6	50	CI around median (Last Sample, n<7)	0.25	4.0	Standard	No Exceedance
AW-23	UA	E003	Lead, total	mg/L	11/21/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.0096	0.0330	Background	No Exceedance
AW-23	UA	E003	Lithium, total	mg/L	11/21/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.038	0.0710	Background	No Exceedance
AW-23	UA	E003	Mercury, total	mg/L	11/21/22 - 11/03/23	6	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
AW-23	UA	E003	Molybdenum, total	mg/L	11/21/22 - 11/03/23	6	67	CI around median (Last Sample, n<7)	0.001	0.1	Standard	No Exceedance

TABLE 4.
SUPPLEMENTAL COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 4, 2023
 845 QUARTERLY REPORT
 EDWARDS POWER PLANT
 ASH POND
 BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
AW-23	UA	E003	pH (field)	SU	11/21/22 - 11/03/23	6	0	CI around mean	6.7/7.0	6.3/9.0	Background/Standard	No Exceedance
AW-23	UA	E003	Radium 226 + Radium 228, total	pCi/L	11/21/22 - 11/03/23	5	0	CI around mean	-0.303	9.60	Background	No Exceedance
AW-23	UA	E003	Selenium, total	mg/L	11/21/22 - 11/03/23	6	100	All ND - Last	0.001	0.05	Standard	No Exceedance
AW-23	UA	E003	Sulfate, total	mg/L	11/21/22 - 11/03/23	6	0	CI around mean	177	400	Standard	No Exceedance
AW-23	UA	E003	Thallium, total	mg/L	11/21/22 - 11/03/23	6	100	All ND - Last	0.001	0.002	Standard	No Exceedance
AW-23	UA	E003	Total Dissolved Solids	mg/L	11/21/22 - 11/03/23	6	0	CI around mean	704	1,200	Standard	No Exceedance
EMW-05	UA	E003	Antimony, total	mg/L	11/18/22 - 11/03/23	6	100	All ND - Last	0.003	0.006	Standard	No Exceedance
EMW-05	UA	E003	Arsenic, total	mg/L	11/18/22 - 11/03/23	6	33	CI around median (Last Sample, n<7)	0.001	0.0300	Background	No Exceedance
EMW-05	UA	E003	Barium, total	mg/L	11/18/22 - 11/03/23	6	0	CI around median (Last Sample, n<7)	0.053	2.07	Background	No Exceedance
EMW-05	UA	E003	Beryllium, total	mg/L	11/18/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.001	0.004	Standard	No Exceedance
EMW-05	UA	E003	Boron, total	mg/L	11/18/22 - 11/03/23	6	0	CI around mean	0.295	2	Standard	No Exceedance
EMW-05	UA	E003	Cadmium, total	mg/L	11/18/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.001	0.005	Standard	No Exceedance
EMW-05	UA	E003	Chloride, total	mg/L	11/18/22 - 11/03/23	6	0	CI around mean	16.7	200	Standard	No Exceedance
EMW-05	UA	E003	Chromium, total	mg/L	11/18/22 - 11/03/23	6	67	CI around median (Last Sample, n<7)	0.004	0.1	Standard	No Exceedance
EMW-05	UA	E003	Cobalt, total	mg/L	11/18/22 - 11/03/23	6	50	CI around median (Last Sample, n<7)	0.002	0.0280	Background	No Exceedance
EMW-05	UA	E003	Fluoride, total	mg/L	11/18/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.25	4.0	Standard	No Exceedance
EMW-05	UA	E003	Lead, total	mg/L	11/18/22 - 11/03/23	6	67	CI around median (Last Sample, n<7)	0.001	0.0330	Background	No Exceedance
EMW-05	UA	E003	Lithium, total	mg/L	11/18/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.02	0.0710	Background	No Exceedance
EMW-05	UA	E003	Mercury, total	mg/L	11/18/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.0002	0.002	Standard	No Exceedance
EMW-05	UA	E003	Molybdenum, total	mg/L	11/18/22 - 11/03/23	6	0	CI around mean	0.000531	0.1	Standard	No Exceedance
EMW-05	UA	E003	pH (field)	SU	12/15/22 - 11/03/23	5	0	CI around mean	6.4/7.3	6.3/9.0	Background/Standard	No Exceedance
EMW-05	UA	E003	Radium 226 + Radium 228, total	pCi/L	11/18/22 - 11/03/23	5	0	CI around mean	0.00842	9.60	Background	No Exceedance
EMW-05	UA	E003	Selenium, total	mg/L	11/18/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.001	0.05	Standard	No Exceedance
EMW-05	UA	E003	Sulfate, total	mg/L	11/18/22 - 11/03/23	6	0	CI around median (Last Sample, n<7)	130	400	Standard	No Exceedance
EMW-05	UA	E003	Thallium, total	mg/L	11/18/22 - 11/03/23	6	100	All ND - Last	0.001	0.002	Standard	No Exceedance
EMW-05	UA	E003	Total Dissolved Solids	mg/L	11/18/22 - 11/03/23	6	17	CI around median (Last Sample, n<7)	860	1,200	Standard	No Exceedance

TABLE 4.
SUPPLEMENTAL COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Notes:

Compliance Result:

No Exceedance: the statistical result did not exceed the GWPS.

Exceedance: The statistical result exceeded the GWPS.

HSU = hydrostratigraphic unit:

UA = Uppermost Aquifer

mg/L = milligrams per liter

ND = non-detect

pCi/L = picocuries per liter

SU = standard units

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

Statistical Calculation = method used to calculate the statistical result:

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

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

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

For pH, the values presented are the lower / upper limits

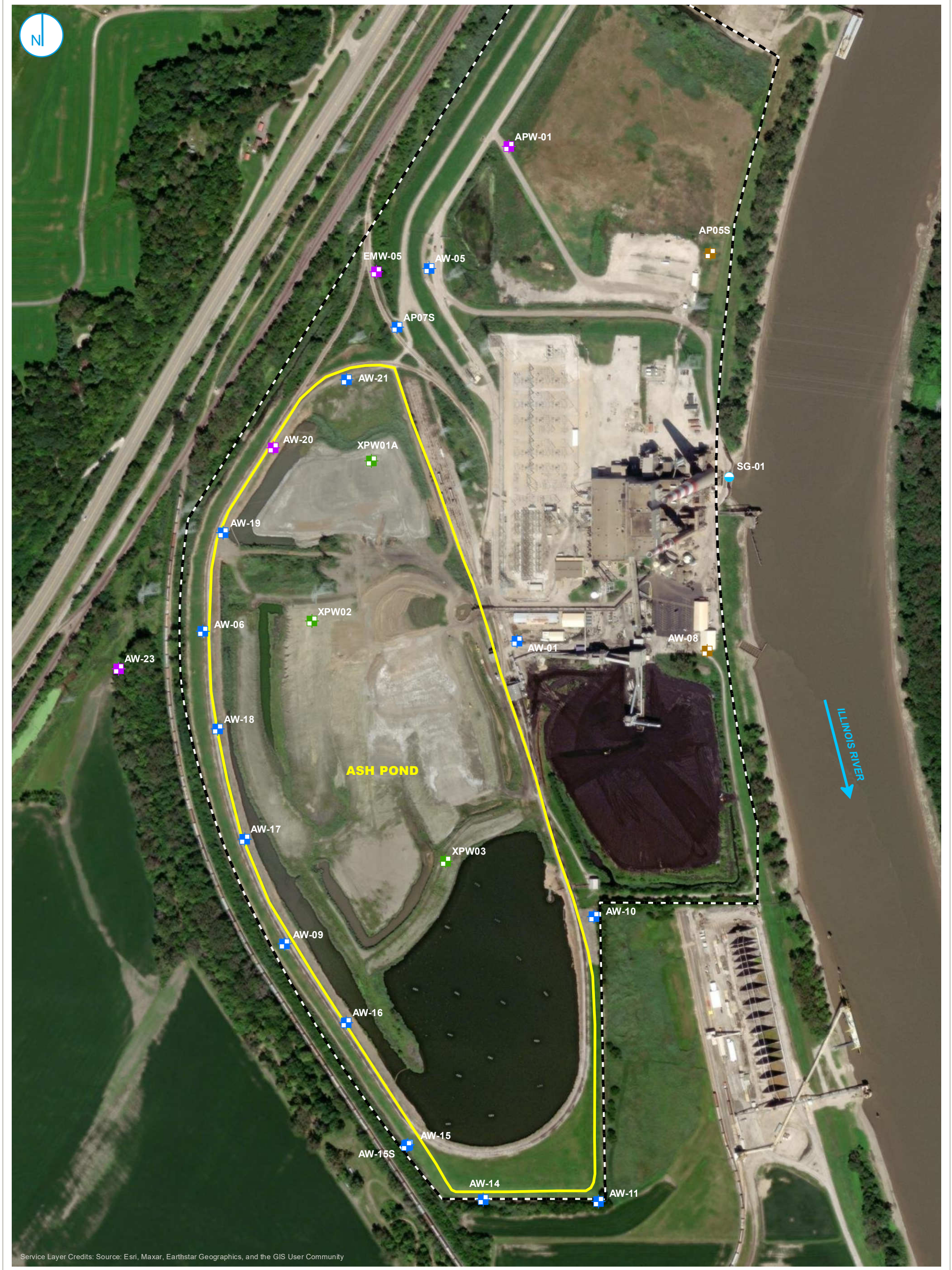
GWPS = Groundwater Protection Standard

GWPS Source:

Standard = standard specified in 35 I.A.C. § 845.600(a)(1)

Background = background concentration (see cover page for additional information)

FIGURES



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

- COMPLIANCE WELL
- BACKGROUND WELL
- SUPPLEMENTAL WELL
- PORE WATER WELL
- STAFF GAGE, RIVER
- REGULATED UNIT (SUBJECT UNIT)
- PROPERTY BOUNDARY

MONITORING WELL LOCATION MAP

FIGURE 1

0 200 400
Feet

ASH POND
EDWARDS POWER PLANT
BARTONVILLE, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



ATTACHMENTS

**ATTACHMENT A
SUMMARY OF GROUNDWATER ELEVATION DATA
QUARTER 4, 2023**

**ATTACHMENT A.
GROUNDWATER ELEVATION DATA - QUARTER 4, 2023**

845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Well Type	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
AP05S	Background	10/27/2023	6.23	437.05
AP07S	Compliance	10/27/2023	25.38	435.70
AW-01	Compliance	10/27/2023	10.12	454.31
AW-05	Compliance	10/27/2023	8.43	434.94
AW-06	Compliance	10/27/2023	27.48	434.09
AW-08	Background	10/27/2023	25.41	437.13
AW-09	Compliance	10/27/2023	27.29	434.16
AW-10	Compliance	10/27/2023	2.33	437.60
AW-11	Compliance	10/27/2023	7.03	432.84
AW-14	Compliance	10/27/2023	8.30	431.10
AW-15	Compliance	10/27/2023	10.02	431.49
AW-15S	Compliance	10/27/2023	10.04	430.67
AW-16	Compliance	10/27/2023	25.92	435.87
AW-17	Compliance	10/27/2023	26.56	435.54
AW-18	Compliance	10/27/2023	28.00	434.65
AW-19	Compliance	10/27/2023	14.16	446.58
AW-21	Compliance	10/27/2023	17.80	442.81
XPW01A	Water Level	10/27/2023	11.89	452.27
XPW02	Water Level	10/27/2023	21.63	452.16
XPW03	Water Level	10/27/2023	18.23	447.81
SG-01	Water Level	10/27/2023	NA	431.00

Notes:

Only wells with groundwater elevations measured are included.

BMP = below measuring point

NA = not available/not applicable

NAVD88 = North American Vertical Datum of 1988

**ATTACHMENT B
LABORATORY REPORTS AND FIELD DATA SHEETS
QUARTER 4, 2023**



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

December 02, 2023

Brian Voelker
Vistra - Edwards
604 Pierce Boulevard
O'Fallon, IL 62269

Dear Brian Voelker:

Please find enclosed the analytical results for the sample(s) the laboratory received. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of Pace Analytical Services, LLC.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

Pace Analytical Services appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the General Manager, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Sincerely,

A handwritten signature in black ink that reads "Diane Billings". The signature is written in a cursive, flowing style.

Diane Billings
Project Manager

SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order GK00258

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
YES	Zero headspace, <6 mm present in VOA vials
YES	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided

Work Order GK00477

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
YES	Zero headspace, <6 mm present in VOA vials
YES	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided

Work Order GK00654

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
YES	Zero headspace, <6 mm present in VOA vials
YES	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided

Work Order GK00898

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
YES	Zero headspace, <6 mm present in VOA vials
YES	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided

Work Order GK03315

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided

ANALYTICAL RESULTS

Sample: GK00258-01
Name: AW-17
Matrix: Ground Water - Grab

Sampled: 11/01/23 11:33
Received: 11/01/23 16:09

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	53	mg/L	Q4	11/08/23 15:09	10	10	11/08/23 15:09	CRD	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L	Q3	11/08/23 14:15	1	0.250	11/08/23 14:15	CRD	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/08/23 14:15	1	1.0	11/08/23 14:15	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	26.8	Feet		11/01/23 11:33	1		11/01/23 11:33	FIELD	Field*
Dissolved oxygen, Field	0.88	mg/L		11/01/23 11:33	1		11/01/23 11:33	FIELD	Field*
Oxidation Reduction Potential	-115	mV		11/01/23 11:33	1	-500	11/01/23 11:33	FIELD	Field*
pH, Field Measured	6.80	pH Units		11/01/23 11:33	1		11/01/23 11:33	FIELD	Field*
Specific Conductance, Field Measured	1840	umhos/cm		11/01/23 11:33	1		11/01/23 11:33	FIELD	Field*
Temperature, Field Measured	13.1	°C		11/01/23 11:33	1		11/01/23 11:33	FIELD	Field*
Turbidity, Field Measured	118	NTU		11/01/23 11:33	1	0.00	11/01/23 11:33	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	890	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	1000	mg/L		11/02/23 10:02	1	26	11/02/23 11:10	LAL2	SM 2540C
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		11/02/23 08:47	5	3.0	11/09/23 12:01	TJJ	EPA 6020A
Arsenic	3.6	ug/L		11/02/23 08:47	5	1.0	11/10/23 11:18	TJJ	EPA 6020A
Barium	970	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:01	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/10/23 11:18	TJJ	EPA 6020A
Boron	420	ug/L		11/02/23 08:47	5	10	11/10/23 11:18	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:01	TJJ	EPA 6020A
Calcium	100	mg/L		11/02/23 08:47	5	0.20	11/09/23 12:01	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/02/23 08:47	5	4.0	11/09/23 12:01	TJJ	EPA 6020A
Cobalt	2.2	ug/L		11/02/23 08:47	5	2.0	11/09/23 12:01	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:01	TJJ	EPA 6020A
Magnesium	41	mg/L		11/02/23 08:47	5	0.10	11/09/23 12:01	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/02/23 08:47	5	0.20	11/09/23 12:01	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:01	TJJ	EPA 6020A
Potassium	4.2	mg/L		11/02/23 08:47	5	0.10	11/09/23 12:01	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/10/23 11:18	TJJ	EPA 6020A
Sodium	210	mg/L		11/02/23 08:47	5	0.10	11/09/23 12:01	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00258-01
Name: AW-17
Matrix: Ground Water - Grab

Sampled: 11/01/23 11:33
Received: 11/01/23 16:09

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:01	TJJ	EPA 6020A
Lithium	33	ug/L		11/02/23 08:47	1	20	11/06/23 11:04	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00258-02
Name: AW-18
Matrix: Ground Water - Grab

Sampled: 11/01/23 12:55
Received: 11/01/23 16:09

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	89	mg/L		11/08/23 15:45	10	10	11/08/23 15:45	CRD	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/08/23 15:27	1	0.250	11/08/23 15:27	CRD	EPA 300.0 REV 2.1
Sulfate	8.2	mg/L		11/08/23 15:27	1	1.0	11/08/23 15:27	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	28.03	Feet		11/01/23 12:55	1		11/01/23 12:55	FIELD	Field*
Dissolved oxygen, Field	0.88	mg/L		11/01/23 12:55	1		11/01/23 12:55	FIELD	Field*
Oxidation Reduction Potential	-111	mV		11/01/23 12:55	1	-500	11/01/23 12:55	FIELD	Field*
pH, Field Measured	6.84	pH Units		11/01/23 12:55	1		11/01/23 12:55	FIELD	Field*
Specific Conductance, Field Measured	1840	umhos/cm		11/01/23 12:55	1		11/01/23 12:55	FIELD	Field*
Temperature, Field Measured	13.4	°C		11/01/23 12:55	1		11/01/23 12:55	FIELD	Field*
Turbidity, Field Measured	149	NTU		11/01/23 12:55	1	0.00	11/01/23 12:55	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	780	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	800	mg/L	M	11/02/23 10:02	1	26	11/02/23 11:10	LAL2	SM 2540C
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		11/02/23 08:47	5	3.0	11/09/23 12:05	TJJ	EPA 6020A
Arsenic	4.2	ug/L		11/02/23 08:47	5	1.0	11/10/23 11:22	TJJ	EPA 6020A
Barium	1500	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:05	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/10/23 11:22	TJJ	EPA 6020A
Boron	330	ug/L		11/02/23 08:47	5	10	11/10/23 11:22	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:05	TJJ	EPA 6020A
Calcium	120	mg/L		11/02/23 08:47	5	0.20	11/09/23 12:05	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/02/23 08:47	5	4.0	11/09/23 12:05	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/02/23 08:47	5	2.0	11/09/23 12:05	TJJ	EPA 6020A
Lead	1.3	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:05	TJJ	EPA 6020A
Magnesium	55	mg/L		11/02/23 08:47	5	0.10	11/09/23 12:05	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/02/23 08:47	5	0.20	11/09/23 12:05	TJJ	EPA 6020A
Molybdenum	1.5	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:05	TJJ	EPA 6020A
Potassium	4.5	mg/L		11/02/23 08:47	5	0.10	11/09/23 12:05	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/10/23 11:22	TJJ	EPA 6020A
Sodium	200	mg/L		11/02/23 08:47	5	0.10	11/09/23 12:05	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00258-02
Name: AW-18
Matrix: Ground Water - Grab

Sampled: 11/01/23 12:55
Received: 11/01/23 16:09

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:05	TJJ	EPA 6020A
Lithium	27	ug/L		11/02/23 08:47	1	20	11/06/23 11:06	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00258-03
Name: AW-19
Matrix: Ground Water - Grab

Sampled: 11/01/23 14:12
Received: 11/01/23 16:09

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	77	mg/L		11/08/23 16:21	10	10	11/08/23 16:21	CRD	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/08/23 16:03	1	0.250	11/08/23 16:03	CRD	EPA 300.0 REV 2.1
Sulfate	57	mg/L		11/08/23 16:21	10	10	11/08/23 16:21	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	14.19	Feet		11/01/23 14:12	1		11/01/23 14:12	FIELD	Field*
Dissolved oxygen, Field	1.0	mg/L		11/01/23 14:12	1		11/01/23 14:12	FIELD	Field*
Oxidation Reduction Potential	-66.0	mV		11/01/23 14:12	1	-500	11/01/23 14:12	FIELD	Field*
pH, Field Measured	7.05	pH Units		11/01/23 14:12	1		11/01/23 14:12	FIELD	Field*
Specific Conductance, Field Measured	1140	umhos/cm		11/01/23 14:12	1		11/01/23 14:12	FIELD	Field*
Temperature, Field Measured	14.4	°C		11/01/23 14:12	1		11/01/23 14:12	FIELD	Field*
Turbidity, Field Measured	79.1	NTU		11/01/23 14:12	1	0.00	11/01/23 14:12	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	460	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	760	mg/L		11/02/23 10:02	1	26	11/02/23 11:10	LAL2	SM 2540C
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		11/02/23 08:47	5	3.0	11/09/23 12:25	TJJ	EPA 6020A
Arsenic	10	ug/L		11/02/23 08:47	5	1.0	11/10/23 11:40	TJJ	EPA 6020A
Barium	190	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:25	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/10/23 11:40	TJJ	EPA 6020A
Boron	3200	ug/L		11/02/23 08:47	5	10	11/10/23 11:40	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:25	TJJ	EPA 6020A
Calcium	120	mg/L		11/02/23 08:47	5	0.20	11/09/23 12:25	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/02/23 08:47	5	4.0	11/09/23 12:25	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/02/23 08:47	5	2.0	11/09/23 12:25	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:25	TJJ	EPA 6020A
Magnesium	54	mg/L		11/02/23 08:47	5	0.10	11/09/23 12:25	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/02/23 08:47	5	0.20	11/09/23 12:25	TJJ	EPA 6020A
Molybdenum	4.1	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:25	TJJ	EPA 6020A
Potassium	0.90	mg/L		11/02/23 08:47	5	0.10	11/09/23 12:25	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/10/23 11:40	TJJ	EPA 6020A
Sodium	54	mg/L		11/02/23 08:47	5	0.10	11/09/23 12:25	TJJ	EPA 6020A

ANALYTICAL RESULTS

Sample: GK00258-03
Name: AW-19
Matrix: Ground Water - Grab

Sampled: 11/01/23 14:12
Received: 11/01/23 16:09

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:25	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/02/23 08:47	1	20	11/06/23 11:08	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00477-01
Name: AW-15
Matrix: Ground Water - Grab

Sampled: 11/02/23 13:19
Received: 11/02/23 16:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	34	mg/L	Q4	11/08/23 21:43	10	10	11/08/23 21:43	CRD	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/08/23 21:25	1	0.250	11/08/23 21:25	CRD	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/08/23 21:25	1	1.0	11/08/23 21:25	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	10.11	Feet		11/02/23 13:19	1		11/02/23 13:19	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		11/02/23 13:19	1		11/02/23 13:19	FIELD	Field*
Oxidation Reduction Potential	-95.0	mV		11/02/23 13:19	1	-500	11/02/23 13:19	FIELD	Field*
pH, Field Measured	6.98	pH Units		11/02/23 13:19	1		11/02/23 13:19	FIELD	Field*
Specific Conductance, Field Measured	1948	umhos/cm		11/02/23 13:19	1		11/02/23 13:19	FIELD	Field*
Temperature, Field Measured	14.0	°C		11/02/23 13:19	1		11/02/23 13:19	FIELD	Field*
Turbidity, Field Measured	2.50	NTU		11/02/23 13:19	1	0.00	11/02/23 13:19	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	1000	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		11/06/23 09:04	5	3.0	11/14/23 13:28	TJJ	EPA 6020A
Arsenic	1.8	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:28	TJJ	EPA 6020A
Barium	1900	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:28	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/13/23 15:23	TJJ	EPA 6020A
Boron	400	ug/L		11/06/23 09:04	5	10	11/13/23 15:23	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:28	TJJ	EPA 6020A
Calcium	140	mg/L		11/06/23 09:04	5	0.20	11/14/23 13:28	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/06/23 09:04	5	4.0	11/14/23 13:28	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/06/23 09:04	5	2.0	11/14/23 13:28	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:28	TJJ	EPA 6020A
Magnesium	59	mg/L		11/06/23 09:04	5	0.10	11/14/23 13:28	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/06/23 09:04	5	0.20	11/14/23 13:28	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:28	TJJ	EPA 6020A
Potassium	4.4	mg/L		11/06/23 09:04	5	0.10	11/14/23 13:28	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 16:52	KMC	EPA 6020A
Sodium	220	mg/L		11/06/23 09:04	5	0.10	11/14/23 13:28	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:28	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00477-01
Name: AW-15
Matrix: Ground Water - Grab

Sampled: 11/02/23 13:19
Received: 11/02/23 16:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Lithium	29	ug/L		11/06/23 09:04	1	20	11/13/23 11:11	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00477-02
Name: AW-15S
Matrix: Ground Water - Grab

Sampled: 11/02/23 14:31
Received: 11/02/23 16:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	30	mg/L		11/08/23 22:20	10	10	11/08/23 22:20	CRD	EPA 300.0 REV 2.1
Sulfate	550	mg/L		11/08/23 23:14	100	100	11/08/23 23:14	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	9.86	Feet		11/02/23 14:31	1		11/02/23 14:31	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		11/02/23 14:31	1		11/02/23 14:31	FIELD	Field*
Oxidation Reduction Potential	1.00	mV		11/02/23 14:31	1	-500	11/02/23 14:31	FIELD	Field*
pH, Field Measured	6.96	pH Units		11/02/23 14:31	1		11/02/23 14:31	FIELD	Field*
Specific Conductance, Field Measured	1795	umhos/cm		11/02/23 14:31	1		11/02/23 14:31	FIELD	Field*
Temperature, Field Measured	16.1	°C		11/02/23 14:31	1		11/02/23 14:31	FIELD	Field*
Turbidity, Field Measured	1.60	NTU		11/02/23 14:31	1	0.00	11/02/23 14:31	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	500	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
Fluoride	0.258	mg/L		11/13/23 10:51	1	0.250	11/13/23 10:51	TTH	SM 4500F C 1997
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		11/06/23 09:04	5	3.0	11/14/23 13:43	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:43	TJJ	EPA 6020A
Barium	84	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:43	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:43	TJJ	EPA 6020A
Boron	6000	ug/L		11/06/23 09:04	20	40	11/13/23 15:34	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:43	TJJ	EPA 6020A
Calcium	270	mg/L		11/06/23 09:04	5	0.20	11/14/23 13:43	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/06/23 09:04	5	4.0	11/14/23 13:43	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/06/23 09:04	5	2.0	11/14/23 13:43	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:43	TJJ	EPA 6020A
Magnesium	88	mg/L		11/06/23 09:04	5	0.10	11/14/23 13:43	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/06/23 09:04	5	0.20	11/16/23 11:57	TJJ	EPA 6020A
Molybdenum	3.5	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:43	TJJ	EPA 6020A
Potassium	0.84	mg/L		11/06/23 09:04	5	0.10	11/14/23 13:43	TJJ	EPA 6020A
Selenium	1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 17:03	KMC	EPA 6020A
Sodium	55	mg/L		11/06/23 09:04	5	0.10	11/14/23 13:43	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:43	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00477-02
Name: AW-15S
Matrix: Ground Water - Grab

Sampled: 11/02/23 14:31
Received: 11/02/23 16:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Lithium	< 20	ug/L		11/06/23 09:04	1	20	11/13/23 11:14	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00477-03
Name: AW-16
Matrix: Ground Water - Grab

Sampled: 11/02/23 13:38
Received: 11/02/23 16:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	48	mg/L		11/08/23 23:50	10	10	11/08/23 23:50	CRD	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/08/23 23:32	1	0.250	11/08/23 23:32	CRD	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/08/23 23:32	1	1.0	11/08/23 23:32	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	26	Feet		11/02/23 13:38	1		11/02/23 13:38	FIELD	Field*
Dissolved oxygen, Field	0.86	mg/L		11/02/23 13:38	1		11/02/23 13:38	FIELD	Field*
Oxidation Reduction Potential	-126	mV		11/02/23 13:38	1	-500	11/02/23 13:38	FIELD	Field*
pH, Field Measured	6.71	pH Units		11/02/23 13:38	1		11/02/23 13:38	FIELD	Field*
Specific Conductance, Field Measured	2180	umhos/cm		11/02/23 13:38	1		11/02/23 13:38	FIELD	Field*
Temperature, Field Measured	14.6	°C		11/02/23 13:38	1		11/02/23 13:38	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		11/02/23 13:38	1	0.00	11/02/23 13:38	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	1100	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		11/06/23 09:04	5	3.0	11/14/23 13:47	TJJ	EPA 6020A
Arsenic	1.2	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:47	TJJ	EPA 6020A
Barium	1100	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:47	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/13/23 15:37	TJJ	EPA 6020A
Boron	420	ug/L		11/06/23 09:04	5	10	11/13/23 15:37	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:47	TJJ	EPA 6020A
Calcium	150	mg/L		11/06/23 09:04	5	0.20	11/14/23 13:47	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/06/23 09:04	5	4.0	11/14/23 13:47	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/06/23 09:04	5	2.0	11/14/23 13:47	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:47	TJJ	EPA 6020A
Magnesium	63	mg/L		11/06/23 09:04	5	0.10	11/14/23 13:47	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/06/23 09:04	5	0.20	11/14/23 13:47	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:47	TJJ	EPA 6020A
Potassium	4.7	mg/L		11/06/23 09:04	5	0.10	11/14/23 13:47	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 17:18	KMC	EPA 6020A
Sodium	260	mg/L		11/06/23 09:04	5	0.10	11/14/23 13:47	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:47	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00477-03
Name: AW-16
Matrix: Ground Water - Grab

Sampled: 11/02/23 13:38
Received: 11/02/23 16:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Lithium	29	ug/L		11/06/23 09:04	1	20	11/13/23 11:15	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00477-04
Name: AW-21
Matrix: Ground Water - Grab

Sampled: 11/02/23 13:10
Received: 11/02/23 16:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	97	mg/L		11/09/23 00:26	10	10	11/09/23 00:26	CRD	EPA 300.0 REV 2.1
Fluoride	0.399	mg/L		11/09/23 00:08	1	0.250	11/09/23 00:08	CRD	EPA 300.0 REV 2.1
Sulfate	260	mg/L		11/09/23 00:44	100	100	11/09/23 00:44	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	17.69	Feet		11/02/23 13:10	1		11/02/23 13:10	FIELD	Field*
Dissolved oxygen, Field	2.4	mg/L		11/02/23 13:10	1		11/02/23 13:10	FIELD	Field*
Oxidation Reduction Potential	46.0	mV		11/02/23 13:10	1	-500	11/02/23 13:10	FIELD	Field*
pH, Field Measured	7.16	pH Units		11/02/23 13:10	1		11/02/23 13:10	FIELD	Field*
Specific Conductance, Field Measured	1100	umhos/cm		11/02/23 13:10	1		11/02/23 13:10	FIELD	Field*
Temperature, Field Measured	15.4	°C		11/02/23 13:10	1		11/02/23 13:10	FIELD	Field*
Turbidity, Field Measured	20.0	NTU		11/02/23 13:10	1	0.00	11/02/23 13:10	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	160	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		11/06/23 09:04	5	3.0	11/14/23 13:51	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:51	TJJ	EPA 6020A
Barium	51	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:51	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:51	TJJ	EPA 6020A
Boron	12000	ug/L		11/06/23 09:04	20	40	11/13/23 15:51	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:51	TJJ	EPA 6020A
Calcium	120	mg/L		11/06/23 09:04	5	0.20	11/14/23 13:51	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/06/23 09:04	5	4.0	11/14/23 13:51	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/06/23 09:04	5	2.0	11/14/23 13:51	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:51	TJJ	EPA 6020A
Magnesium	39	mg/L		11/06/23 09:04	5	0.10	11/14/23 13:51	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/06/23 09:04	5	0.20	11/14/23 13:51	TJJ	EPA 6020A
Molybdenum	28	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:51	TJJ	EPA 6020A
Potassium	1.6	mg/L		11/06/23 09:04	5	0.10	11/14/23 13:51	TJJ	EPA 6020A
Selenium	3.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 17:22	KMC	EPA 6020A
Sodium	62	mg/L		11/06/23 09:04	5	0.10	11/14/23 13:51	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:51	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00477-04
Name: AW-21
Matrix: Ground Water - Grab

Sampled: 11/02/23 13:10
Received: 11/02/23 16:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Lithium	< 20	ug/L		11/06/23 09:04	1	20	11/13/23 11:17	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00477-06
Name: AW-16 FD
Matrix: Ground Water - Field Duplicate

Sampled: 11/02/23 13:38
Received: 11/02/23 16:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	48	mg/L		11/09/23 01:39	10	10	11/09/23 01:39	CRD	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/09/23 01:20	1	0.250	11/09/23 01:20	CRD	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/09/23 01:20	1	1.0	11/09/23 01:20	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	26	Feet		11/02/23 13:38	1		11/02/23 13:38	FIELD	Field*
Dissolved oxygen, Field	0.86	mg/L		11/02/23 13:38	1		11/02/23 13:38	FIELD	Field*
Oxidation Reduction Potential	-126	mV		11/02/23 13:38	1	-500	11/02/23 13:38	FIELD	Field*
pH, Field Measured	6.71	pH Units		11/02/23 13:38	1		11/02/23 13:38	FIELD	Field*
Specific Conductance, Field Measured	2180	umhos/cm		11/02/23 13:38	1		11/02/23 13:38	FIELD	Field*
Temperature, Field Measured	14.6	°C		11/02/23 13:38	1		11/02/23 13:38	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		11/02/23 13:38	1	0.00	11/02/23 13:38	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	1100	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		11/06/23 09:04	5	3.0	11/14/23 13:59	TJJ	EPA 6020A
Arsenic	1.1	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:59	TJJ	EPA 6020A
Barium	1100	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:59	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/13/23 15:57	TJJ	EPA 6020A
Boron	420	ug/L		11/06/23 09:04	5	10	11/13/23 15:57	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:59	TJJ	EPA 6020A
Calcium	150	mg/L		11/06/23 09:04	5	0.20	11/14/23 13:59	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/06/23 09:04	5	4.0	11/14/23 13:59	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/06/23 09:04	5	2.0	11/14/23 13:59	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:59	TJJ	EPA 6020A
Magnesium	63	mg/L		11/06/23 09:04	5	0.10	11/14/23 13:59	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/06/23 09:04	5	0.20	11/14/23 13:59	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:59	TJJ	EPA 6020A
Potassium	4.7	mg/L		11/06/23 09:04	5	0.10	11/14/23 13:59	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 17:30	KMC	EPA 6020A
Sodium	260	mg/L		11/06/23 09:04	5	0.10	11/14/23 13:59	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 13:59	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00477-06

Name: AW-16 FD

Matrix: Ground Water - Field Duplicate

Sampled: 11/02/23 13:38

Received: 11/02/23 16:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Lithium	31	ug/L		11/06/23 09:04	1	20	11/13/23 11:19	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00654-01
Name: AP07S
Matrix: Ground Water - Grab

Sampled: 11/03/23 13:20
Received: 11/03/23 15:03

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	73	mg/L	Q4	11/09/23 16:03	50	50	11/09/23 16:03	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/09/23 13:03	1	0.250	11/09/23 13:03	TMS	EPA 300.0 REV 2.1
Sulfate	180	mg/L	Q4	11/09/23 16:03	50	50	11/09/23 16:03	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	25.15	Feet		11/03/23 13:20	1		11/03/23 13:20	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		11/03/23 13:20	1		11/03/23 13:20	FIELD	Field*
Oxidation Reduction Potential	-56.0	mV		11/03/23 13:20	1	-500	11/03/23 13:20	FIELD	Field*
pH, Field Measured	7.50	pH Units		11/03/23 13:20	1		11/03/23 13:20	FIELD	Field*
Specific Conductance, Field Measured	1320	umhos/cm		11/03/23 13:20	1		11/03/23 13:20	FIELD	Field*
Temperature, Field Measured	16.2	°C		11/03/23 13:20	1		11/03/23 13:20	FIELD	Field*
Turbidity, Field Measured	2.90	NTU		11/03/23 13:20	1	0.00	11/03/23 13:20	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	310	mg/L		11/15/23 13:05	1	10	11/15/23 13:05	LAL2/CP S	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/23 13:05	1	10	11/15/23 13:05	LAL2/CP S	SM 2320B 1997*
Solids - total dissolved solids (TDS)	720	mg/L		11/08/23 14:24	1	26	11/08/23 15:45	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/06/23 09:04	5	3.0	11/14/23 14:33	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:33	TJJ	EPA 6020A
Barium	48	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:33	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:33	TJJ	EPA 6020A
Boron	8200	ug/L		11/06/23 09:04	20	40	11/13/23 16:05	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:33	TJJ	EPA 6020A
Calcium	130	mg/L		11/06/23 09:04	5	0.20	11/14/23 14:33	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/06/23 09:04	5	4.0	11/14/23 14:33	TJJ	EPA 6020A
Cobalt	2.6	ug/L		11/06/23 09:04	5	2.0	11/14/23 14:33	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:33	TJJ	EPA 6020A
Magnesium	49	mg/L		11/06/23 09:04	5	0.10	11/14/23 14:33	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/06/23 09:04	5	0.20	11/14/23 14:33	TJJ	EPA 6020A
Molybdenum	1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:33	TJJ	EPA 6020A
Potassium	0.48	mg/L		11/06/23 09:04	5	0.10	11/14/23 14:33	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 17:33	KMC	EPA 6020A
Sodium	63	mg/L		11/06/23 09:04	5	0.10	11/14/23 14:33	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00654-01
Name: AP07S
Matrix: Ground Water - Grab

Sampled: 11/03/23 13:20
Received: 11/03/23 15:03

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:33	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/06/23 09:04	1	20	11/13/23 11:23	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00654-02
Name: AW-11
Matrix: Ground Water - Grab

Sampled: 11/03/23 14:10
Received: 11/03/23 15:03

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	33	mg/L		11/09/23 16:39	10	10	11/09/23 16:39	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/09/23 16:21	1	0.250	11/09/23 16:21	TMS	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/09/23 16:21	1	1.0	11/09/23 16:21	TMS	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	6.9	Feet		11/03/23 14:10	1		11/03/23 14:10	FIELD	Field*
Dissolved oxygen, Field	1.9	mg/L		11/03/23 14:10	1		11/03/23 14:10	FIELD	Field*
Oxidation Reduction Potential	-148	mV		11/03/23 14:10	1	-500	11/03/23 14:10	FIELD	Field*
pH, Field Measured	6.87	pH Units		11/03/23 14:10	1		11/03/23 14:10	FIELD	Field*
Specific Conductance, Field Measured	1850	umhos/cm		11/03/23 14:10	1		11/03/23 14:10	FIELD	Field*
Temperature, Field Measured	14.8	°C		11/03/23 14:10	1		11/03/23 14:10	FIELD	Field*
Turbidity, Field Measured	169	NTU		11/03/23 14:10	1	0.00	11/03/23 14:10	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	980	mg/L		11/15/23 13:05	1	10	11/15/23 13:05	LAL2/CP S	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/23 13:05	1	10	11/15/23 13:05	LAL2/CP S	SM 2320B 1997*
Solids - total dissolved solids (TDS)	870	mg/L		11/08/23 14:24	1	26	11/08/23 15:45	OGS	SM 2540C
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		11/06/23 09:04	5	3.0	11/14/23 14:37	TJJ	EPA 6020A
Arsenic	11	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:37	TJJ	EPA 6020A
Barium	840	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:37	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/13/23 16:08	TJJ	EPA 6020A
Boron	260	ug/L		11/06/23 09:04	5	10	11/13/23 16:08	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:37	TJJ	EPA 6020A
Calcium	160	mg/L		11/06/23 09:04	5	0.20	11/14/23 14:37	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/06/23 09:04	5	4.0	11/14/23 14:37	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/06/23 09:04	5	2.0	11/14/23 14:37	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:37	TJJ	EPA 6020A
Magnesium	72	mg/L		11/06/23 09:04	5	0.10	11/14/23 14:37	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/06/23 09:04	5	0.20	11/14/23 14:37	TJJ	EPA 6020A
Molybdenum	2.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:37	TJJ	EPA 6020A
Potassium	2.8	mg/L		11/06/23 09:04	5	0.10	11/14/23 14:37	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 17:37	KMC	EPA 6020A
Sodium	160	mg/L		11/06/23 09:04	5	0.10	11/14/23 14:37	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00654-02
Name: AW-11
Matrix: Ground Water - Grab

Sampled: 11/03/23 14:10
Received: 11/03/23 15:03

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:37	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/06/23 09:04	1	20	11/13/23 11:24	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00654-03
Name: AW-14
Matrix: Ground Water - Grab

Sampled: 11/03/23 13:14
Received: 11/03/23 15:03

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	28	mg/L		11/09/23 17:52	5	5.0	11/09/23 17:52	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/09/23 17:34	1	0.250	11/09/23 17:34	TMS	EPA 300.0 REV 2.1
Sulfate	6.5	mg/L		11/09/23 17:34	1	1.0	11/09/23 17:34	TMS	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	7.82	Feet		11/03/23 13:14	1		11/03/23 13:14	FIELD	Field*
Dissolved oxygen, Field	1.6	mg/L		11/03/23 13:14	1		11/03/23 13:14	FIELD	Field*
Oxidation Reduction Potential	-128	mV		11/03/23 13:14	1	-500	11/03/23 13:14	FIELD	Field*
pH, Field Measured	6.76	pH Units		11/03/23 13:14	1		11/03/23 13:14	FIELD	Field*
Specific Conductance, Field Measured	1840	umhos/cm		11/03/23 13:14	1		11/03/23 13:14	FIELD	Field*
Temperature, Field Measured	14.5	°C		11/03/23 13:14	1		11/03/23 13:14	FIELD	Field*
Turbidity, Field Measured	330	NTU		11/03/23 13:14	1	0.00	11/03/23 13:14	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	1000	mg/L		11/15/23 13:05	1	10	11/15/23 13:05	LAL2/CP S	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/23 13:05	1	10	11/15/23 13:05	LAL2/CP S	SM 2320B 1997*
Solids - total dissolved solids (TDS)	980	mg/L		11/08/23 14:24	1	26	11/08/23 15:45	OGS	SM 2540C
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		11/06/23 09:04	5	3.0	11/14/23 14:40	TJJ	EPA 6020A
Arsenic	4.1	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:40	TJJ	EPA 6020A
Barium	830	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:40	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:40	TJJ	EPA 6020A
Boron	240	ug/L		11/06/23 09:04	20	40	11/13/23 16:11	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:40	TJJ	EPA 6020A
Calcium	170	mg/L		11/06/23 09:04	5	0.20	11/14/23 14:40	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/06/23 09:04	5	4.0	11/14/23 14:40	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/06/23 09:04	5	2.0	11/14/23 14:40	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:40	TJJ	EPA 6020A
Magnesium	69	mg/L		11/06/23 09:04	5	0.10	11/14/23 14:40	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/06/23 09:04	5	0.20	11/14/23 14:40	TJJ	EPA 6020A
Molybdenum	1.8	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:40	TJJ	EPA 6020A
Potassium	3.1	mg/L		11/06/23 09:04	5	0.10	11/14/23 14:40	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 17:41	KMC	EPA 6020A
Sodium	150	mg/L		11/06/23 09:04	5	0.10	11/14/23 14:40	TJJ	EPA 6020A

ANALYTICAL RESULTS

Sample: GK00654-03
Name: AW-14
Matrix: Ground Water - Grab

Sampled: 11/03/23 13:14
Received: 11/03/23 15:03

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:40	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/06/23 09:04	1	20	11/13/23 11:25	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00898-01
Name: AP05S
Matrix: Ground Water - Grab

Sampled: 11/06/23 11:00
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	46	mg/L	Q4	11/10/23 16:19	10	10	11/10/23 16:19	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/10/23 15:24	1	0.250	11/10/23 15:24	TMS	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L	Q3	11/10/23 15:24	1	1.0	11/10/23 15:24	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	6.3	Feet		11/06/23 11:00	1		11/06/23 11:00	FIELD	Field*
Dissolved oxygen, Field	1.5	mg/L		11/06/23 11:00	1		11/06/23 11:00	FIELD	Field*
Oxidation Reduction Potential	-127	mV		11/06/23 11:00	1	-500	11/06/23 11:00	FIELD	Field*
pH, Field Measured	6.80	pH Units		11/06/23 11:00	1		11/06/23 11:00	FIELD	Field*
Specific Conductance, Field Measured	1670	umhos/cm		11/06/23 11:00	1		11/06/23 11:00	FIELD	Field*
Temperature, Field Measured	15.6	°C		11/06/23 11:00	1		11/06/23 11:00	FIELD	Field*
Turbidity, Field Measured	531	NTU		11/06/23 11:00	1	0.00	11/06/23 11:00	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	800	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	960	mg/L		11/09/23 12:50	1	26	11/09/23 14:48	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/09/23 07:19	5	3.0	11/14/23 16:55	TJJ	EPA 6020A
Arsenic	2.7	ug/L		11/09/23 07:19	5	1.0	11/14/23 16:55	TJJ	EPA 6020A
Barium	1000	ug/L		11/09/23 07:19	5	1.0	11/14/23 16:55	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/13/23 17:19	TJJ	EPA 6020A
Boron	330	ug/L		11/09/23 07:19	5	10	11/13/23 17:19	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 16:55	TJJ	EPA 6020A
Calcium	110	mg/L		11/09/23 07:19	5	0.20	11/14/23 16:55	TJJ	EPA 6020A
Chromium	6.7	ug/L		11/09/23 07:19	5	4.0	11/14/23 16:55	TJJ	EPA 6020A
Cobalt	4.2	ug/L		11/09/23 07:19	5	2.0	11/14/23 16:55	TJJ	EPA 6020A
Lead	3.8	ug/L		11/09/23 07:19	5	1.0	11/14/23 16:55	TJJ	EPA 6020A
Magnesium	48	mg/L		11/09/23 07:19	5	0.10	11/16/23 14:43	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/09/23 07:19	5	0.20	11/16/23 14:43	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 16:55	TJJ	EPA 6020A
Potassium	4.3	mg/L		11/09/23 07:19	5	0.10	11/14/23 16:55	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 15:48	KMC	EPA 6020A
Sodium	180	mg/L		11/09/23 07:19	5	0.10	11/15/23 12:41	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00898-01
Name: AP05S
Matrix: Ground Water - Grab

Sampled: 11/06/23 11:00
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 16:55	TJJ	EPA 6020A
Lithium	32	ug/L		11/09/23 07:19	1	20	11/13/23 11:31	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00898-03
Name: AW-01
Matrix: Ground Water - Grab

Sampled: 11/06/23 14:40
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	10	mg/L		11/10/23 17:31	5	5.0	11/10/23 17:31	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/10/23 17:13	1	0.250	11/10/23 17:13	TMS	EPA 300.0 REV 2.1
Sulfate	50	mg/L		11/10/23 17:31	5	5.0	11/10/23 17:31	TMS	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	9.9	Feet		11/06/23 14:40	1		11/06/23 14:40	FIELD	Field*
Dissolved oxygen, Field	1.8	mg/L		11/06/23 14:40	1		11/06/23 14:40	FIELD	Field*
Oxidation Reduction Potential	-83.0	mV		11/06/23 14:40	1	-500	11/06/23 14:40	FIELD	Field*
pH, Field Measured	6.76	pH Units		11/06/23 14:40	1		11/06/23 14:40	FIELD	Field*
Specific Conductance, Field Measured	1340	umhos/cm		11/06/23 14:40	1		11/06/23 14:40	FIELD	Field*
Temperature, Field Measured	17.9	°C		11/06/23 14:40	1		11/06/23 14:40	FIELD	Field*
Turbidity, Field Measured	304	NTU		11/06/23 14:40	1	0.00	11/06/23 14:40	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	700	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	770	mg/L		11/09/23 12:50	1	26	11/09/23 14:48	OGS	SM 2540C
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		11/09/23 07:19	5	3.0	11/14/23 17:10	TJJ	EPA 6020A
Arsenic	12	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:10	TJJ	EPA 6020A
Barium	140	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:10	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/13/23 17:31	TJJ	EPA 6020A
Boron	86	ug/L		11/09/23 07:19	5	10	11/13/23 17:31	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:10	TJJ	EPA 6020A
Calcium	190	mg/L		11/09/23 07:19	5	0.20	11/14/23 17:10	TJJ	EPA 6020A
Chromium	4.1	ug/L		11/09/23 07:19	5	4.0	11/14/23 17:10	TJJ	EPA 6020A
Cobalt	6.0	ug/L		11/09/23 07:19	5	2.0	11/14/23 17:10	TJJ	EPA 6020A
Lead	2.2	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:10	TJJ	EPA 6020A
Magnesium	84	mg/L		11/09/23 07:19	5	0.10	11/16/23 14:54	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/09/23 07:19	5	0.20	11/16/23 14:54	TJJ	EPA 6020A
Molybdenum	3.4	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:10	TJJ	EPA 6020A
Potassium	0.77	mg/L		11/09/23 07:19	5	0.10	11/14/23 17:10	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 16:03	KMC	EPA 6020A
Sodium	18	mg/L		11/09/23 07:19	5	0.10	11/16/23 14:54	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00898-03
Name: AW-01
Matrix: Ground Water - Grab

Sampled: 11/06/23 14:40
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:10	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/09/23 07:19	1	20	11/13/23 11:38	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00898-04
Name: AW-05
Matrix: Ground Water - Grab

Sampled: 11/06/23 15:47
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	81	mg/L		11/10/23 19:01	50	50	11/10/23 19:01	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/10/23 18:07	1	0.250	11/10/23 18:07	TMS	EPA 300.0 REV 2.1
Sulfate	5.7	mg/L		11/10/23 18:07	1	1.0	11/10/23 18:07	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	8.68	Feet		11/06/23 15:47	1		11/06/23 15:47	FIELD	Field*
Dissolved oxygen, Field	1.5	mg/L		11/06/23 15:47	1		11/06/23 15:47	FIELD	Field*
Oxidation Reduction Potential	-42.0	mV		11/06/23 15:47	1	-500	11/06/23 15:47	FIELD	Field*
pH, Field Measured	6.85	pH Units		11/06/23 15:47	1		11/06/23 15:47	FIELD	Field*
Specific Conductance, Field Measured	1730	umhos/cm		11/06/23 15:47	1		11/06/23 15:47	FIELD	Field*
Temperature, Field Measured	17.3	°C		11/06/23 15:47	1		11/06/23 15:47	FIELD	Field*
Turbidity, Field Measured	699	NTU		11/06/23 15:47	1	0.00	11/06/23 15:47	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	350	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	1300	mg/L		11/09/23 12:50	1	26	11/09/23 14:48	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/09/23 07:19	5	3.0	11/14/23 17:14	TJJ	EPA 6020A
Arsenic	3.2	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:14	TJJ	EPA 6020A
Barium	110	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:14	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:14	TJJ	EPA 6020A
Boron	11000	ug/L		11/09/23 07:19	20	40	11/13/23 17:34	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:14	TJJ	EPA 6020A
Calcium	180	mg/L		11/09/23 07:19	5	0.20	11/14/23 17:14	TJJ	EPA 6020A
Chromium	4.2	ug/L		11/09/23 07:19	5	4.0	11/14/23 17:14	TJJ	EPA 6020A
Cobalt	3.3	ug/L		11/09/23 07:19	5	2.0	11/14/23 17:14	TJJ	EPA 6020A
Lead	1.8	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:14	TJJ	EPA 6020A
Magnesium	92	mg/L		11/09/23 07:19	5	0.10	11/16/23 14:58	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/09/23 07:19	5	0.20	11/16/23 14:58	TJJ	EPA 6020A
Molybdenum	2.2	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:14	TJJ	EPA 6020A
Potassium	1.3	mg/L		11/09/23 07:19	5	0.10	11/14/23 17:14	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 16:07	KMC	EPA 6020A
Sodium	91	mg/L		11/09/23 07:19	5	0.10	11/16/23 14:58	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00898-04
Name: AW-05
Matrix: Ground Water - Grab

Sampled: 11/06/23 15:47
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:14	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/09/23 07:19	1	20	11/13/23 11:39	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00898-05
Name: AW-06
Matrix: Ground Water - Grab

Sampled: 11/06/23 12:50
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	37	mg/L		11/10/23 19:37	10	10	11/10/23 19:37	TMS	EPA 300.0 REV 2.1
Fluoride	0.282	mg/L		11/10/23 19:19	1	0.250	11/10/23 19:19	TMS	EPA 300.0 REV 2.1
Sulfate	23	mg/L		11/10/23 19:37	10	10	11/10/23 19:37	TMS	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	27.43	Feet		11/06/23 12:50	1		11/06/23 12:50	FIELD	Field*
Dissolved oxygen, Field	1.6	mg/L		11/06/23 12:50	1		11/06/23 12:50	FIELD	Field*
Oxidation Reduction Potential	-91.0	mV		11/06/23 12:50	1	-500	11/06/23 12:50	FIELD	Field*
pH, Field Measured	7.41	pH Units		11/06/23 12:50	1		11/06/23 12:50	FIELD	Field*
Specific Conductance, Field Measured	1120	umhos/cm		11/06/23 12:50	1		11/06/23 12:50	FIELD	Field*
Temperature, Field Measured	16.1	°C		11/06/23 12:50	1		11/06/23 12:50	FIELD	Field*
Turbidity, Field Measured	609	NTU		11/06/23 12:50	1	0.00	11/06/23 12:50	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	480	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	570	mg/L		11/09/23 12:50	1	26	11/09/23 14:48	OGS	SM 2540C
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		11/09/23 07:19	5	3.0	11/14/23 17:26	TJJ	EPA 6020A
Arsenic	4.4	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:26	TJJ	EPA 6020A
Barium	180	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:26	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/13/23 17:37	TJJ	EPA 6020A
Boron	150	ug/L		11/09/23 07:19	5	10	11/13/23 17:37	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:26	TJJ	EPA 6020A
Calcium	110	mg/L		11/09/23 07:19	5	0.20	11/14/23 17:26	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/09/23 07:19	5	4.0	11/14/23 17:26	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/09/23 07:19	5	2.0	11/14/23 17:26	TJJ	EPA 6020A
Lead	1.6	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:26	TJJ	EPA 6020A
Magnesium	49	mg/L		11/09/23 07:19	5	0.10	11/16/23 15:02	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/09/23 07:19	5	0.20	11/14/23 17:26	TJJ	EPA 6020A
Molybdenum	4.7	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:26	TJJ	EPA 6020A
Potassium	1.0	mg/L		11/09/23 07:19	5	0.10	11/14/23 17:26	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 16:11	KMC	EPA 6020A
Sodium	60	mg/L		11/09/23 07:19	5	0.10	11/16/23 15:02	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00898-05
Name: AW-06
Matrix: Ground Water - Grab

Sampled: 11/06/23 12:50
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:26	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/09/23 07:19	1	20	11/13/23 11:40	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00898-06
Name: AW-08
Matrix: Ground Water - Grab

Sampled: 11/06/23 16:13
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	20	mg/L		11/10/23 20:14	5	5.0	11/10/23 20:14	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/10/23 19:56	1	0.250	11/10/23 19:56	TMS	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/10/23 19:56	1	1.0	11/10/23 19:56	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	25.43	Feet		11/06/23 16:13	1		11/06/23 16:13	FIELD	Field*
Dissolved oxygen, Field	0.070	mg/L		11/06/23 16:13	1		11/06/23 16:13	FIELD	Field*
Oxidation Reduction Potential	-150	mV		11/06/23 16:13	1	-500	11/06/23 16:13	FIELD	Field*
pH, Field Measured	7.32	pH Units		11/06/23 16:13	1		11/06/23 16:13	FIELD	Field*
Specific Conductance, Field Measured	1550	umhos/cm		11/06/23 16:13	1		11/06/23 16:13	FIELD	Field*
Temperature, Field Measured	18.6	°C		11/06/23 16:13	1		11/06/23 16:13	FIELD	Field*
Turbidity, Field Measured	>1000	NTU		11/06/23 16:13	1	0.00	11/06/23 16:13	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	940	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	720	mg/L		11/09/23 12:50	1	26	11/09/23 14:48	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 6.0	ug/L		11/09/23 07:19	10	6.0	11/14/23 17:30	TJJ	EPA 6020A
Arsenic	88	ug/L		11/09/23 07:19	50	10	11/16/23 15:06	TJJ	EPA 6020A
Barium	5800	ug/L		11/09/23 07:19	10	2.0	11/14/23 17:30	TJJ	EPA 6020A
Beryllium	24	ug/L		11/09/23 07:19	10	2.0	11/14/23 17:30	TJJ	EPA 6020A
Boron	350	ug/L		11/09/23 07:19	10	20	11/13/23 17:49	TJJ	EPA 6020A
Cadmium	15	ug/L		11/09/23 07:19	10	2.0	11/14/23 17:30	TJJ	EPA 6020A
Calcium	760	mg/L		11/09/23 07:19	10	0.40	11/14/23 17:30	TJJ	EPA 6020A
Chromium	680	ug/L		11/09/23 07:19	10	8.0	11/14/23 17:30	TJJ	EPA 6020A
Cobalt	400	ug/L		11/09/23 07:19	10	4.0	11/14/23 17:30	TJJ	EPA 6020A
Lead	420	ug/L		11/09/23 07:19	10	2.0	11/14/23 17:30	TJJ	EPA 6020A
Magnesium	450	mg/L		11/09/23 07:19	50	1.0	11/16/23 15:06	TJJ	EPA 6020A
Mercury	1.1	ug/L		11/09/23 07:19	10	0.40	11/14/23 17:30	TJJ	EPA 6020A
Molybdenum	14	ug/L		11/09/23 07:19	10	2.0	11/14/23 17:30	TJJ	EPA 6020A
Potassium	41	mg/L		11/09/23 07:19	10	0.20	11/14/23 17:30	TJJ	EPA 6020A
Selenium	15	ug/L		11/09/23 07:19	50	10	11/20/23 14:02	KMC	EPA 6020A
Sodium	93	mg/L		11/09/23 07:19	50	1.0	11/16/23 15:06	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00898-06
Name: AW-08
Matrix: Ground Water - Grab

Sampled: 11/06/23 16:13
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	4.1	ug/L		11/09/23 07:19	10	2.0	11/14/23 17:30	TJJ	EPA 6020A
Lithium	660	ug/L		11/09/23 07:19	10	200	11/13/23 11:41	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00898-07
Name: AW-09
Matrix: Ground Water - Grab

Sampled: 11/06/23 11:15
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	29	mg/L		11/10/23 20:50	5	5.0	11/10/23 20:50	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/10/23 20:32	1	0.250	11/10/23 20:32	TMS	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/10/23 20:32	1	1.0	11/10/23 20:32	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	27.17	Feet		11/06/23 11:15	1		11/06/23 11:15	FIELD	Field*
Dissolved oxygen, Field	1.8	mg/L		11/06/23 11:15	1		11/06/23 11:15	FIELD	Field*
Oxidation Reduction Potential	-110	mV		11/06/23 11:15	1	-500	11/06/23 11:15	FIELD	Field*
pH, Field Measured	7.07	pH Units		11/06/23 11:15	1		11/06/23 11:15	FIELD	Field*
Specific Conductance, Field Measured	1480	umhos/cm		11/06/23 11:15	1		11/06/23 11:15	FIELD	Field*
Temperature, Field Measured	16.9	°C		11/06/23 11:15	1		11/06/23 11:15	FIELD	Field*
Turbidity, Field Measured	234	NTU		11/06/23 11:15	1	0.00	11/06/23 11:15	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	750	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	800	mg/L		11/09/23 12:50	1	26	11/09/23 14:48	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/09/23 07:19	5	3.0	11/14/23 17:34	TJJ	EPA 6020A
Arsenic	24	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:34	TJJ	EPA 6020A
Barium	430	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:34	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/13/23 17:52	TJJ	EPA 6020A
Boron	310	ug/L		11/09/23 07:19	5	10	11/13/23 17:52	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:34	TJJ	EPA 6020A
Calcium	120	mg/L		11/09/23 07:19	5	0.20	11/14/23 17:34	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/09/23 07:19	5	4.0	11/14/23 17:34	TJJ	EPA 6020A
Cobalt	3.1	ug/L		11/09/23 07:19	5	2.0	11/14/23 17:34	TJJ	EPA 6020A
Lead	1.2	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:34	TJJ	EPA 6020A
Magnesium	50	mg/L		11/09/23 07:19	5	0.10	11/16/23 15:10	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/09/23 07:19	5	0.20	11/14/23 17:34	TJJ	EPA 6020A
Molybdenum	21	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:34	TJJ	EPA 6020A
Potassium	2.3	mg/L		11/09/23 07:19	5	0.10	11/14/23 17:34	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 16:29	KMC	EPA 6020A
Sodium	140	mg/L		11/09/23 07:19	5	0.10	11/16/23 15:10	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00898-07
Name: AW-09
Matrix: Ground Water - Grab

Sampled: 11/06/23 11:15
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:34	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/09/23 07:19	1	20	11/13/23 11:43	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00898-08
Name: AW-10
Matrix: Ground Water - Grab

Sampled: 11/06/23 14:40
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	84	mg/L		11/10/23 21:26	25	25	11/10/23 21:26	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/10/23 21:08	1	0.250	11/10/23 21:08	TMS	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/10/23 21:08	1	1.0	11/10/23 21:08	TMS	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	2.39	Feet		11/06/23 14:40	1		11/06/23 14:40	FIELD	Field*
Dissolved oxygen, Field	1.6	mg/L		11/06/23 14:40	1		11/06/23 14:40	FIELD	Field*
Oxidation Reduction Potential	-125	mV		11/06/23 14:40	1	-500	11/06/23 14:40	FIELD	Field*
pH, Field Measured	7.31	pH Units		11/06/23 14:40	1		11/06/23 14:40	FIELD	Field*
Specific Conductance, Field Measured	2190	umhos/cm		11/06/23 14:40	1		11/06/23 14:40	FIELD	Field*
Temperature, Field Measured	17.8	°C		11/06/23 14:40	1		11/06/23 14:40	FIELD	Field*
Turbidity, Field Measured	520	NTU		11/06/23 14:40	1	0.00	11/06/23 14:40	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	980	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	1100	mg/L		11/09/23 12:50	1	26	11/09/23 14:48	OGS	SM 2540C
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		11/09/23 07:19	5	3.0	11/14/23 17:38	TJJ	EPA 6020A
Arsenic	12	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:38	TJJ	EPA 6020A
Barium	1000	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:38	TJJ	EPA 6020A
Beryllium	1.3	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:38	TJJ	EPA 6020A
Boron	470	ug/L		11/09/23 07:19	5	10	11/13/23 17:55	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:38	TJJ	EPA 6020A
Calcium	140	mg/L		11/09/23 07:19	5	0.20	11/14/23 17:38	TJJ	EPA 6020A
Chromium	29	ug/L		11/09/23 07:19	5	4.0	11/14/23 17:38	TJJ	EPA 6020A
Cobalt	18	ug/L		11/09/23 07:19	5	2.0	11/14/23 17:38	TJJ	EPA 6020A
Lead	18	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:38	TJJ	EPA 6020A
Magnesium	74	mg/L		11/09/23 07:19	5	0.10	11/16/23 15:14	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/09/23 07:19	5	0.20	11/14/23 17:38	TJJ	EPA 6020A
Molybdenum	1.9	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:38	TJJ	EPA 6020A
Potassium	5.2	mg/L		11/09/23 07:19	5	0.10	11/14/23 17:38	TJJ	EPA 6020A
Selenium	1.1	ug/L		11/09/23 07:19	5	1.0	11/14/23 16:33	KMC	EPA 6020A
Sodium	260	mg/L		11/09/23 07:19	5	0.10	11/16/23 15:14	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00898-08
Name: AW-10
Matrix: Ground Water - Grab

Sampled: 11/06/23 14:40
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:38	TJJ	EPA 6020A
Lithium	58	ug/L		11/09/23 07:19	1	20	11/13/23 11:44	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00898-09
Name: AW-01 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 11/06/23 14:40
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	9.8	mg/L		11/10/23 22:38	5	5.0	11/10/23 22:38	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/10/23 21:44	1	0.250	11/10/23 21:44	TMS	EPA 300.0 REV 2.1
Sulfate	48	mg/L		11/10/23 22:38	5	5.0	11/10/23 22:38	TMS	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	9.9	Feet		11/06/23 14:40	1		11/06/23 14:40	FIELD	Field*
Dissolved oxygen, Field	1.8	mg/L		11/06/23 14:40	1		11/06/23 14:40	FIELD	Field*
Oxidation Reduction Potential	-83.0	mV		11/06/23 14:40	1	-500	11/06/23 14:40	FIELD	Field*
pH, Field Measured	6.76	pH Units		11/06/23 14:40	1		11/06/23 14:40	FIELD	Field*
Specific Conductance, Field Measured	1340	umhos/cm		11/06/23 14:40	1		11/06/23 14:40	FIELD	Field*
Temperature, Field Measured	17.9	°C		11/06/23 14:40	1		11/06/23 14:40	FIELD	Field*
Turbidity, Field Measured	304	NTU		11/06/23 14:40	1	0.00	11/06/23 14:40	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	700	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	790	mg/L		11/09/23 12:50	1	26	11/09/23 14:48	OGS	SM 2540C
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		11/09/23 07:19	5	3.0	11/14/23 17:41	TJJ	EPA 6020A
Arsenic	12	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:41	TJJ	EPA 6020A
Barium	140	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:41	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/13/23 17:58	TJJ	EPA 6020A
Boron	81	ug/L		11/09/23 07:19	5	10	11/13/23 17:58	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:41	TJJ	EPA 6020A
Calcium	190	mg/L		11/09/23 07:19	5	0.20	11/14/23 17:41	TJJ	EPA 6020A
Chromium	5.2	ug/L		11/09/23 07:19	5	4.0	11/14/23 17:41	TJJ	EPA 6020A
Cobalt	6.0	ug/L		11/09/23 07:19	5	2.0	11/14/23 17:41	TJJ	EPA 6020A
Lead	2.3	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:41	TJJ	EPA 6020A
Magnesium	83	mg/L		11/09/23 07:19	5	0.10	11/16/23 15:18	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/09/23 07:19	5	0.20	11/14/23 17:41	TJJ	EPA 6020A
Molybdenum	3.4	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:41	TJJ	EPA 6020A
Potassium	0.92	mg/L		11/09/23 07:19	5	0.10	11/14/23 17:41	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 16:37	KMC	EPA 6020A
Sodium	18	mg/L		11/09/23 07:19	5	0.10	11/16/23 15:18	TJJ	EPA 6020A

ANALYTICAL RESULTS

Sample: GK00898-09
Name: AW-01 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 11/06/23 14:40
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:41	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/09/23 07:19	1	20	11/13/23 11:45	BRS	EPA 6010B

Sample: GK00898-11
Name: SG-01
Matrix: Ground Water

Sampled: 10/27/23 15:46
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
-----------	--------	------	-----------	----------	----------	-----	----------	---------	--------

Field - PIA

Depth, From Measuring Point	431	Feet		10/27/23 15:46	1		10/27/23 15:46	DAB	Field*
-----------------------------	-----	------	--	----------------	---	--	----------------	-----	--------

Sample: GK00898-14
Name: XPWO1A
Matrix: Ground Water

Sampled: 10/27/23 13:46
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
-----------	--------	------	-----------	----------	----------	-----	----------	---------	--------

Field - PIA

Depth, From Measuring Point	11.89	Feet		10/27/23 13:46	1		10/27/23 13:46	DAB	Field*
-----------------------------	-------	------	--	----------------	---	--	----------------	-----	--------

Sample: GK00898-15
Name: XPWO2
Matrix: Ground Water

Sampled: 10/27/23 13:40
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
-----------	--------	------	-----------	----------	----------	-----	----------	---------	--------

Field - PIA

Depth, From Measuring Point	21.63	Feet		10/27/23 13:40	1		10/27/23 13:40	DAB	Field*
-----------------------------	-------	------	--	----------------	---	--	----------------	-----	--------

Sample: GK00898-16
Name: XPWO3
Matrix: Ground Water

Sampled: 10/27/23 13:35
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
-----------	--------	------	-----------	----------	----------	-----	----------	---------	--------

Field - PIA

Depth, From Measuring Point	18.23	Feet		10/27/23 13:35	1		10/27/23 13:35	DAB	Field*
-----------------------------	-------	------	--	----------------	---	--	----------------	-----	--------

ANALYTICAL RESULTS

Sample: GK03315-01
Name: AW-15
Matrix: Ground Water - Grab

Sampled: 11/17/23 11:13
Received: 11/17/23 12:12

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1000	mg/L		11/17/23 15:35	1	26	11/17/23 16:23	OGS	SM 2540C

Sample: GK03315-02
Name: AW-15S
Matrix: Ground Water - Grab

Sampled: 11/17/23 11:37
Received: 11/17/23 12:12

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1200	mg/L		11/17/23 15:35	1	26	11/17/23 16:23	OGS	SM 2540C

Sample: GK03315-03
Name: AW-16
Matrix: Ground Water - Grab

Sampled: 11/17/23 10:43
Received: 11/17/23 12:12

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1100	mg/L	M	11/17/23 15:35	1	26	11/17/23 16:23	OGS	SM 2540C

Sample: GK03315-04
Name: AW-16 FD
Matrix: Ground Water - Grab

Sampled: 11/17/23 10:43
Received: 11/17/23 12:12

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1100	mg/L		11/17/23 15:35	1	26	11/17/23 16:23	OGS	SM 2540C



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK03315-05
Name: AW-21
Matrix: Ground Water - Grab

Sampled: 11/17/23 10:03
Received: 11/17/23 12:12

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Solids - total dissolved solids (TDS)	690	mg/L		11/17/23 15:35	1	26	11/17/23 16:23	OGS	SM 2540C

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B348049 - SW 3015 - EPA 6010B</u>									
Blank (B348049-BLK1)				Prepared: 11/02/23 Analyzed: 11/06/23					
Lithium	< 20	ug/L							
LCS (B348049-BS1)				Prepared: 11/02/23 Analyzed: 11/06/23					
Lithium	523	ug/L		555.6		94	80-120		
Matrix Spike (B348049-MS1)				Sample: GJ04997-11 Prepared: 11/02/23 Analyzed: 11/06/23					
Lithium	542	ug/L		555.6	23.3	93	75-125		
Matrix Spike Dup (B348049-MSD1)				Sample: GJ04997-11 Prepared: 11/02/23 Analyzed: 11/06/23					
Lithium	565	ug/L		555.6	23.3	98	75-125	4	20
<u>Batch B348049 - SW 3015 - EPA 6020A</u>									
Blank (B348049-BLK1)				Prepared: 11/02/23 Analyzed: 11/09/23					
Antimony	< 3.0	ug/L							
Arsenic	< 1.0	ug/L							
Barium	< 1.0	ug/L							
Beryllium	< 1.0	ug/L							
Boron	< 10	ug/L							
Cadmium	< 1.0	ug/L							
Calcium	< 0.20	mg/L							
Chromium	< 4.0	ug/L							
Cobalt	< 2.0	ug/L							
Lead	< 1.0	ug/L							
Magnesium	< 0.10	mg/L							
Mercury	< 0.20	ug/L							
Molybdenum	< 1.0	ug/L							
Potassium	< 0.10	mg/L							
Selenium	< 1.0	ug/L							
Sodium	< 0.10	mg/L							
Thallium	< 1.0	ug/L							
Blank (B348049-BLK2)				Prepared: 11/02/23 Analyzed: 11/14/23					
Selenium	< 1.0	ug/L							
LCS (B348049-BS1)				Prepared: 11/02/23 Analyzed: 11/09/23					
Antimony	563	ug/L		555.6		101	80-120		
Arsenic	552	ug/L		555.6		99	80-120		
Barium	540	ug/L		555.6		97	80-120		
Beryllium	534	ug/L		555.6		96	80-120		
Boron	500	ug/L		555.6		90	80-120		
Cadmium	532	ug/L		555.6		96	80-120		
Calcium	5.60	mg/L		5.556		101	80-120		
Chromium	548	ug/L		555.6		99	80-120		
Cobalt	544	ug/L		555.6		98	80-120		
Lead	539	ug/L		555.6		97	80-120		
Magnesium	5.60	mg/L		5.556		101	80-120		
Mercury	52.1	ug/L		55.56		94	80-120		
Molybdenum	530	ug/L		555.6		95	80-120		
Potassium	5.47	mg/L		5.556		99	80-120		

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
LCS (B348049-BS1)				Prepared: 11/02/23 Analyzed: 11/10/23					
Selenium	582	ug/L		555.6		105	80-120		
Sodium	5.59	mg/L		5.556		101	80-120		
Thallium	536	ug/L		555.6		97	80-120		
LCS (B348049-BS4)				Prepared: 11/02/23 Analyzed: 11/14/23					
Selenium	587	ug/L		555.6		106	80-120		
Matrix Spike (B348049-MS1)				Sample: GJ04997-11		Prepared: 11/02/23 Analyzed: 11/09/23			
Antimony	438	ug/L		555.6	0.594	79	75-125		
Arsenic	522	ug/L		555.6	28.5	89	75-125		
Barium	727	ug/L		555.6	219	92	75-125		
Beryllium	514	ug/L		555.6	1.36	92	75-125		
Boron	5440	ug/L		555.6	4970	85	75-125		
Cadmium	529	ug/L		555.6	ND	95	75-125		
Calcium	233	mg/L	Q4	5.556	229	70	75-125		
Chromium	570	ug/L		555.6	36.7	96	75-125		
Cobalt	542	ug/L		555.6	24.4	93	75-125		
Lead	563	ug/L		555.6	33.7	95	75-125		
Magnesium	93.0	mg/L	Q4	5.556	89.6	60	75-125		
Mercury	52.0	ug/L		55.56	0.156	93	75-125		
Molybdenum	538	ug/L		555.6	9.36	95	75-125		
Potassium	9.46	mg/L		5.556	4.16	95	75-125		
Selenium	491	ug/L		555.6	3.09	88	75-125		
Sodium	104	mg/L	Q4	5.556	101	58	75-125		
Thallium	521	ug/L		555.6	0.422	94	75-125		
Matrix Spike Dup (B348049-MSD1)				Sample: GJ04997-11		Prepared: 11/02/23 Analyzed: 11/09/23			
Antimony	413	ug/L	Q2	555.6	0.594	74	75-125	6	20
Arsenic	521	ug/L		555.6	28.5	89	75-125	0.3	20
Barium	737	ug/L		555.6	219	93	75-125	1	20
Beryllium	501	ug/L		555.6	1.36	90	75-125	3	20
Boron	5330	ug/L	Q4	555.6	4970	66	75-125	2	20
Cadmium	533	ug/L		555.6	ND	96	75-125	0.8	20
Calcium	235	mg/L		5.556	229	108	75-125	0.9	20
Chromium	574	ug/L		555.6	36.7	97	75-125	0.6	20
Cobalt	540	ug/L		555.6	24.4	93	75-125	0.3	20
Lead	557	ug/L		555.6	33.7	94	75-125	1	20
Magnesium	93.8	mg/L		5.556	89.6	76	75-125	0.9	20
Mercury	53.8	ug/L		55.56	0.156	96	75-125	3	20
Molybdenum	543	ug/L		555.6	9.36	96	75-125	1	20
Potassium	9.90	mg/L		5.556	4.16	103	75-125	5	20
Selenium	482	ug/L		555.6	3.09	86	75-125	2	20
Sodium	104	mg/L	Q4	5.556	101	58	75-125	0.002	20
Thallium	521	ug/L		555.6	0.422	94	75-125	0.05	20
<u>Batch B348082 - No Prep - SM 2540C</u>									
Blank (B348082-BLK1)				Prepared & Analyzed: 11/02/23					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B348082-BS1)				Prepared & Analyzed: 11/02/23					
Solids - total dissolved solids (TDS)	973	mg/L		1000		97	84.9-109		

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Duplicate (B348082-DUP1)				Sample: GK00258-01		Prepared & Analyzed: 11/02/23			
Solids - total dissolved solids (TDS)	1010	mg/L			1040			2	5
Duplicate (B348082-DUP2)				Sample: GK00258-02		Prepared & Analyzed: 11/02/23			
Solids - total dissolved solids (TDS)	955	mg/L	M		795			18	5
<u>Batch B348302 - SW 3015 - EPA 6010B</u>									
Blank (B348302-BLK1)				Prepared: 11/06/23 Analyzed: 11/13/23					
Lithium	< 20	ug/L							
LCS (B348302-BS1)				Prepared: 11/06/23 Analyzed: 11/13/23					
Lithium	550	ug/L		555.6		99	80-120		
Matrix Spike (B348302-MS1)				Sample: GK00477-01		Prepared: 11/06/23 Analyzed: 11/13/23			
Lithium	561	ug/L		555.6	28.7	96	75-125		
Matrix Spike Dup (B348302-MSD1)				Sample: GK00477-01		Prepared: 11/06/23 Analyzed: 11/13/23			
Lithium	563	ug/L		555.6	28.7	96	75-125	0.5	20
<u>Batch B348302 - SW 3015 - EPA 6020A</u>									
Blank (B348302-BLK1)				Prepared: 11/06/23 Analyzed: 11/14/23					
Antimony	< 3.0	ug/L							
Arsenic	< 1.0	ug/L							
Barium	< 1.0	ug/L							
Beryllium	< 1.0	ug/L							
Boron	< 10	ug/L							
Cadmium	< 1.0	ug/L							
Calcium	< 0.20	mg/L							
Chromium	< 4.0	ug/L							
Cobalt	< 2.0	ug/L							
Lead	< 1.0	ug/L							
Magnesium	< 0.10	mg/L							
Mercury	< 0.20	ug/L							
Molybdenum	< 1.0	ug/L							
Potassium	< 0.10	mg/L							
Selenium	< 1.0	ug/L							
Sodium	< 0.10	mg/L							
Thallium	< 1.0	ug/L							
LCS (B348302-BS1)				Prepared: 11/06/23 Analyzed: 11/14/23					
Antimony	547	ug/L		555.6		98	80-120		
Arsenic	559	ug/L		555.6		101	80-120		
Barium	526	ug/L		555.6		95	80-120		
Beryllium	586	ug/L		555.6		105	80-120		
Boron	543	ug/L		555.6		98	80-120		
Cadmium	555	ug/L		555.6		100	80-120		
Calcium	5.83	mg/L		5.556		105	80-120		
Chromium	584	ug/L		555.6		105	80-120		
Cobalt	597	ug/L		555.6		108	80-120		
Lead	577	ug/L		555.6		104	80-120		
Magnesium	6.23	mg/L		5.556		112	80-120		
Mercury	53.6	ug/L		55.56		97	80-120		
Molybdenum	544	ug/L		555.6		98	80-120		

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
LCS (B348302-BS1)				Prepared: 11/06/23 Analyzed: 11/14/23					
Potassium	6.12	mg/L		5.556		110	80-120		
Selenium	555	ug/L		555.6		100	80-120		
Sodium	6.25	mg/L		5.556		113	80-120		
Thallium	569	ug/L		555.6		102	80-120		
Matrix Spike (B348302-MS1)				Sample: GK00477-01		Prepared: 11/06/23 Analyzed: 11/14/23			
Antimony	539	ug/L		555.6	ND	97	75-125		
Arsenic	565	ug/L		555.6	1.84	101	75-125		
Barium	2390	ug/L		555.6	1850	96	75-125		
Beryllium	585	ug/L		555.6	ND	105	75-125		
Boron	915	ug/L		555.6	396	93	75-125		
Cadmium	565	ug/L		555.6	ND	102	75-125		
Calcium	146	mg/L	Q4	5.556	142	71	75-125		
Chromium	589	ug/L		555.6	ND	106	75-125		
Cobalt	604	ug/L		555.6	1.67	108	75-125		
Lead	567	ug/L		555.6	ND	102	75-125		
Magnesium	64.0	mg/L		5.556	59.1	89	75-125		
Mercury	56.4	ug/L		55.56	0.150	101	75-125		
Molybdenum	571	ug/L		555.6	ND	103	75-125		
Potassium	10.4	mg/L		5.556	4.45	107	75-125		
Selenium	564	ug/L		555.6	0.356	101	75-125		
Sodium	222	mg/L	Q4	5.556	221	15	75-125		
Thallium	557	ug/L		555.6	ND	100	75-125		
Matrix Spike Dup (B348302-MSD1)				Sample: GK00477-01		Prepared: 11/06/23 Analyzed: 11/14/23			
Antimony	541	ug/L		555.6	ND	97	75-125	0.4	20
Arsenic	563	ug/L		555.6	1.84	101	75-125	0.3	20
Barium	2400	ug/L		555.6	1850	99	75-125	0.6	20
Beryllium	589	ug/L		555.6	ND	106	75-125	0.8	20
Boron	928	ug/L		555.6	396	96	75-125	1	20
Cadmium	560	ug/L		555.6	ND	101	75-125	1	20
Calcium	147	mg/L		5.556	142	83	75-125	0.5	20
Chromium	580	ug/L		555.6	ND	104	75-125	2	20
Cobalt	598	ug/L		555.6	1.67	107	75-125	1	20
Lead	564	ug/L		555.6	ND	101	75-125	0.7	20
Magnesium	63.7	mg/L		5.556	59.1	83	75-125	0.5	20
Mercury	54.7	ug/L		55.56	0.150	98	75-125	3	20
Molybdenum	561	ug/L		555.6	ND	101	75-125	2	20
Potassium	10.4	mg/L		5.556	4.45	106	75-125	0.5	20
Selenium	561	ug/L		555.6	0.356	101	75-125	0.7	20
Sodium	222	mg/L	Q4	5.556	221	23	75-125	0.2	20
Thallium	551	ug/L		555.6	ND	99	75-125	1	20
<u>Batch B348625 - No Prep - SM 2540C</u>									
Blank (B348625-BLK1)				Prepared & Analyzed: 11/08/23					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B348625-BS1)				Prepared & Analyzed: 11/08/23					
Solids - total dissolved solids (TDS)	940	mg/L		1000		94	84.9-109		
Duplicate (B348625-DUP1)				Sample: GK00676-16		Prepared & Analyzed: 11/08/23			

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Duplicate (B348625-DUP1)									
Sample: GK00676-16			Prepared & Analyzed: 11/08/23						
Solids - total dissolved solids (TDS)	980	mg/L			985			0.5	5
Duplicate (B348625-DUP2)									
Sample: GK00696-01			Prepared & Analyzed: 11/08/23						
Solids - total dissolved solids (TDS)	5050	mg/L			5090			0.8	5
<u>Batch B348662 - SW 3015 - EPA 6010B</u>									
Blank (B348662-BLK1)									
			Prepared: 11/09/23 Analyzed: 11/13/23						
Lithium	< 20	ug/L							
LCS (B348662-BS1)									
			Prepared: 11/09/23 Analyzed: 11/13/23						
Lithium	573	ug/L		555.6		103	80-120		
Matrix Spike (B348662-MS1)									
Sample: GK00898-01			Prepared: 11/09/23 Analyzed: 11/13/23						
Lithium	563	ug/L		555.6	31.7	96	75-125		
Matrix Spike Dup (B348662-MSD1)									
Sample: GK00898-01			Prepared: 11/09/23 Analyzed: 11/13/23						
Lithium	580	ug/L		555.6	31.7	99	75-125	3	20
<u>Batch B348662 - SW 3015 - EPA 6020A</u>									
Blank (B348662-BLK1)									
			Prepared: 11/09/23 Analyzed: 11/14/23						
Antimony	< 3.0	ug/L							
Arsenic	< 1.0	ug/L							
Barium	< 1.0	ug/L							
Beryllium	< 1.0	ug/L							
Boron	< 10	ug/L							
Cadmium	< 1.0	ug/L							
Calcium	< 0.20	mg/L							
Chromium	< 4.0	ug/L							
Cobalt	< 2.0	ug/L							
Lead	< 1.0	ug/L							
Magnesium	< 0.10	mg/L							
Mercury	< 0.20	ug/L							
Molybdenum	< 1.0	ug/L							
Potassium	< 0.10	mg/L							
Selenium	< 1.0	ug/L							
Sodium	< 0.10	mg/L							
Thallium	< 1.0	ug/L							
LCS (B348662-BS1)									
			Prepared: 11/09/23 Analyzed: 11/14/23						
Antimony	545	ug/L		555.6		98	80-120		
Arsenic	552	ug/L		555.6		99	80-120		
Barium	516	ug/L		555.6		93	80-120		
Beryllium	585	ug/L		555.6		105	80-120		
Boron	547	ug/L		555.6		99	80-120		
Cadmium	562	ug/L		555.6		101	80-120		
Calcium	6.38	mg/L		5.556		115	80-120		
Chromium	594	ug/L		555.6		107	80-120		
Cobalt	612	ug/L		555.6		110	80-120		
Lead	580	ug/L		555.6		104	80-120		
Magnesium	5.91	mg/L		5.556		106	80-120		
Mercury	51.2	ug/L		55.56		92	80-120		
Molybdenum	554	ug/L		555.6		100	80-120		

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
LCS (B348662-BS1)				Prepared: 11/09/23 Analyzed: 11/14/23					
Potassium	6.17	mg/L		5.556		111	80-120		
Selenium	581	ug/L		555.6		105	80-120		
Sodium	5.93	mg/L		5.556		107	80-120		
Thallium	567	ug/L		555.6		102	80-120		
Matrix Spike (B348662-MS1)				Sample: GK00898-01 Prepared: 11/09/23 Analyzed: 11/14/23					
Antimony	510	ug/L		555.6	ND	92	75-125		
Arsenic	538	ug/L		555.6	2.67	96	75-125		
Barium	1600	ug/L		555.6	1040	100	75-125		
Beryllium	571	ug/L		555.6	ND	103	75-125		
Boron	869	ug/L		555.6	331	97	75-125		
Cadmium	554	ug/L		555.6	ND	100	75-125		
Calcium	114	mg/L		5.556	108	109	75-125		
Chromium	588	ug/L		555.6	6.66	105	75-125		
Cobalt	599	ug/L		555.6	4.17	107	75-125		
Lead	571	ug/L		555.6	3.84	102	75-125		
Magnesium	54.8	mg/L	Q4	5.556	48.4	115	75-125		
Mercury	54.1	ug/L		55.56	0.178	97	75-125		
Molybdenum	554	ug/L		555.6	0.817	100	75-125		
Potassium	10.3	mg/L		5.556	4.35	107	75-125		
Selenium	550	ug/L		555.6	0.472	99	75-125		
Thallium	552	ug/L		555.6	ND	99	75-125		
Matrix Spike Dup (B348662-MSD1)				Sample: GK00898-01 Prepared: 11/09/23 Analyzed: 11/14/23					
Antimony	512	ug/L		555.6	ND	92	75-125	0.3	20
Arsenic	541	ug/L		555.6	2.67	97	75-125	0.6	20
Barium	1590	ug/L		555.6	1040	98	75-125	0.7	20
Beryllium	586	ug/L		555.6	ND	106	75-125	3	20
Boron	876	ug/L		555.6	331	98	75-125	0.8	20
Cadmium	558	ug/L		555.6	ND	100	75-125	0.8	20
Calcium	112	mg/L		5.556	108	83	75-125	1	20
Chromium	587	ug/L		555.6	6.66	104	75-125	0.1	20
Cobalt	604	ug/L		555.6	4.17	108	75-125	0.7	20
Lead	570	ug/L		555.6	3.84	102	75-125	0.2	20
Magnesium	54.5	mg/L	Q4	5.556	48.4	110	75-125	0.5	20
Mercury	54.5	ug/L		55.56	0.178	98	75-125	0.6	20
Molybdenum	558	ug/L		555.6	0.817	100	75-125	0.8	20
Potassium	10.3	mg/L		5.556	4.35	106	75-125	0.6	20
Selenium	551	ug/L		555.6	0.472	99	75-125	0.3	20
Thallium	551	ug/L		555.6	ND	99	75-125	0.2	20
<u>Batch B348706 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B348706-CCB1)				Prepared & Analyzed: 11/08/23					
Fluoride	0.00	mg/L							
Chloride	0.00	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B348706-CCV1)				Prepared & Analyzed: 11/08/23					
Chloride	5.01	mg/L		5.000		100	90-110		
Fluoride	5.22	mg/L		5.000		104	90-110		

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Calibration Check (B348706-CCV1)				Prepared & Analyzed: 11/08/23					
Sulfate	4.98	mg/L		5.000		100	90-110		
Matrix Spike (B348706-MS1)				Sample: GK00477-01 Prepared & Analyzed: 11/09/23					
Chloride	< 1.0	mg/L	Q4	1.500	34	NR	80-120		
Sulfate	1.62	mg/L		1.500	0.208	94	80-120		
Fluoride	1.34	mg/L		1.500	ND	89	80-120		
Matrix Spike Dup (B348706-MSD1)				Sample: GK00477-01 Prepared & Analyzed: 11/09/23					
Chloride	1.0E9	mg/L	Q4	1.500	34	NR	80-120		20
Sulfate	1.72	mg/L		1.500	0.208	101	80-120	6	20
Fluoride	1.53	mg/L		1.500	ND	102	80-120	13	20
<u>Batch B348707 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B348707-CCB1)				Prepared & Analyzed: 11/08/23					
Sulfate	0.00	mg/L							
Fluoride	0.00	mg/L							
Chloride	0.00	mg/L							
Calibration Check (B348707-CCV1)				Prepared & Analyzed: 11/08/23					
Sulfate	4.95	mg/L		5.000		99	90-110		
Chloride	5.05	mg/L		5.000		101	90-110		
Fluoride	5.20	mg/L		5.000		104	90-110		
Matrix Spike (B348707-MS1)				Sample: GK00258-01 Prepared & Analyzed: 11/08/23					
Chloride	< 1.0	mg/L	Q4	1.500	53	NR	80-120		
Sulfate	1.50	mg/L		1.500	ND	100	80-120		
Fluoride	1.24	mg/L	Q1	1.500	0.0458	80	80-120		
Matrix Spike Dup (B348707-MSD1)				Sample: GK00258-01 Prepared & Analyzed: 11/08/23					
Fluoride	1.21	mg/L	Q2	1.500	0.0458	77	80-120	3	20
Sulfate	1.36	mg/L		1.500	ND	91	80-120	10	20
Chloride	< 1.0	mg/L	Q4	1.500	53	NR	80-120		20
<u>Batch B348728 - No Prep - SM 2540C</u>									
Blank (B348728-BLK1)				Prepared & Analyzed: 11/09/23					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B348728-BS1)				Prepared & Analyzed: 11/09/23					
Solids - total dissolved solids (TDS)	953	mg/L		1000		95	84.9-109		
Duplicate (B348728-DUP1)				Sample: GK00898-02 Prepared & Analyzed: 11/09/23					
Solids - total dissolved solids (TDS)	945	mg/L				975		3	5
Duplicate (B348728-DUP2)				Sample: GK00898-06 Prepared & Analyzed: 11/09/23					
Solids - total dissolved solids (TDS)	695	mg/L				725		4	5
<u>Batch B348876 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B348876-CCB1)				Prepared & Analyzed: 11/09/23					
Chloride	0.00	mg/L							
Sulfate	0.00	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B348876-CCV1)				Prepared & Analyzed: 11/09/23					
Fluoride	4.92	mg/L		5.000		98	90-110		
Chloride	4.84	mg/L		5.000		97	90-110		
Sulfate	4.85	mg/L		5.000		97	90-110		

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike (B348876-MS1)	Sample: GK00654-01			Prepared & Analyzed: 11/09/23					
Fluoride	1.63	mg/L		1.500	0.229	93	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	184	NR	80-120		
Chloride	1.0E9	mg/L	Q4	1.500	73	NR	80-120		
Matrix Spike (B348876-MS2)	Sample: GK01692-01			Prepared & Analyzed: 11/09/23					
Sulfate	1.00E9	mg/L	Q4	1.500	316	NR	80-120		
Matrix Spike Dup (B348876-MSD1)	Sample: GK00654-01			Prepared & Analyzed: 11/09/23					
Fluoride	1.64	mg/L		1.500	0.229	94	80-120	1	20
Chloride	1.0E9	mg/L	Q4	1.500	73	NR	80-120	0	20
Sulfate	1.00E9	mg/L	Q4	1.500	184	NR	80-120	0	20
Matrix Spike Dup (B348876-MSD2)	Sample: GK01692-01			Prepared & Analyzed: 11/09/23					
Sulfate	1.00E9	mg/L	Q4	1.500	316	NR	80-120	0	20
<u>Batch B348981 - No Prep - SM 4500F C 1997</u>									
Calibration Blank (B348981-CCB1)				Prepared & Analyzed: 11/13/23					
Fluoride	0.00300	mg/L							
Calibration Blank (B348981-CCB2)				Prepared & Analyzed: 11/13/23					
Fluoride	0.0170	mg/L							
Calibration Check (B348981-CCV1)				Prepared & Analyzed: 11/13/23					
Fluoride	0.678	mg/L		0.7000		97	90-110		
Calibration Check (B348981-CCV2)				Prepared & Analyzed: 11/13/23					
Fluoride	0.743	mg/L		0.7000		106	90-110		
Matrix Spike (B348981-MS1)	Sample: GK00477-02			Prepared & Analyzed: 11/13/23					
Fluoride	1.30	mg/L		1.000	0.258	104	80-120		
Matrix Spike (B348981-MS2)	Sample: GK00851-01			Prepared & Analyzed: 11/13/23					
Fluoride	1.72	mg/L		1.000	0.665	106	80-120		
Matrix Spike (B348981-MS3)	Sample: GK01076-01			Prepared & Analyzed: 11/13/23					
Fluoride	1.79	mg/L		1.000	0.718	108	80-120		
Matrix Spike (B348981-MS4)	Sample: GK01082-01			Prepared & Analyzed: 11/13/23					
Fluoride	1.72	mg/L		1.000	0.669	105	80-120		
Matrix Spike (B348981-MS5)	Sample: GK01233-01			Prepared & Analyzed: 11/13/23					
Fluoride	1.57	mg/L		1.000	0.566	100	80-120		
Matrix Spike (B348981-MS6)	Sample: GK01247-01			Prepared & Analyzed: 11/13/23					
Fluoride	1.79	mg/L		1.000	0.225	157	80-120		
Matrix Spike (B348981-MS7)	Sample: GK01316-01			Prepared & Analyzed: 11/13/23					
Fluoride	1.84	mg/L		1.000	0.643	120	80-120		
Matrix Spike (B348981-MS8)	Sample: GK01354-03			Prepared & Analyzed: 11/13/23					
Fluoride	1.77	mg/L		1.000	0.636	113	80-120		
Matrix Spike (B348981-MS9)	Sample: GK01247-06			Prepared & Analyzed: 11/13/23					
Fluoride	1.21	mg/L		1.000	0.135	108	80-120		
Matrix Spike (B348981-MSA)	Sample: GK01393-01			Prepared & Analyzed: 11/13/23					
Fluoride	1.66	mg/L		1.000	0.662	100	80-120		
Matrix Spike Dup (B348981-MSD1)	Sample: GK00477-02			Prepared & Analyzed: 11/13/23					
Fluoride	1.31	mg/L		1.000	0.258	105	80-120	0.6	20
Matrix Spike Dup (B348981-MSD2)	Sample: GK00851-01			Prepared & Analyzed: 11/13/23					
Fluoride	1.70	mg/L		1.000	0.665	104	80-120	1	20
Matrix Spike Dup (B348981-MSD3)	Sample: GK01076-01			Prepared & Analyzed: 11/13/23					
Fluoride	1.80	mg/L		1.000	0.718	108	80-120	0.4	20

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike Dup (B348981-MSD4)				Sample: GK01082-01		Prepared & Analyzed: 11/13/23			
Fluoride	1.74	mg/L		1.000	0.669	107	80-120	1	20
Matrix Spike Dup (B348981-MSD5)				Sample: GK01233-01		Prepared & Analyzed: 11/13/23			
Fluoride	1.64	mg/L		1.000	0.566	108	80-120	5	20
Matrix Spike Dup (B348981-MSD6)				Sample: GK01247-01		Prepared & Analyzed: 11/13/23			
Fluoride	1.76	mg/L		1.000	0.225	154	80-120	1	20
Matrix Spike Dup (B348981-MSD7)				Sample: GK01316-01		Prepared & Analyzed: 11/13/23			
Fluoride	1.73	mg/L		1.000	0.643	108	80-120	7	20
Matrix Spike Dup (B348981-MSD8)				Sample: GK01354-03		Prepared & Analyzed: 11/13/23			
Fluoride	1.68	mg/L		1.000	0.636	105	80-120	5	20
Matrix Spike Dup (B348981-MSD9)				Sample: GK01247-06		Prepared & Analyzed: 11/13/23			
Fluoride	1.17	mg/L		1.000	0.135	103	80-120	4	20
Matrix Spike Dup (B348981-MSDA)				Sample: GK01393-01		Prepared & Analyzed: 11/13/23			
Fluoride	1.76	mg/L		1.000	0.662	110	80-120	6	20
<u>Batch B349001 - No Prep - SM 2320B 1997</u>									
Duplicate (B349001-DUP1)				Sample: GJ05390-01		Prepared & Analyzed: 11/13/23			
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO3	500	mg/L			500			0	10
Duplicate (B349001-DUP2)				Sample: GK00258-01		Prepared & Analyzed: 11/13/23			
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO3	875	mg/L			888			1	10
Duplicate (B349001-DUP3)				Sample: GK00477-01		Prepared & Analyzed: 11/13/23			
Alkalinity - bicarbonate as CaCO3	1000	mg/L			1000			0	10
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
<u>Batch B349006 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B349006-CCB1)				Prepared & Analyzed: 11/10/23					
Sulfate	0.00	mg/L							
Fluoride	0.00	mg/L							
Chloride	0.155	mg/L							
Calibration Check (B349006-CCV1)				Prepared & Analyzed: 11/10/23					
Sulfate	5.16	mg/L		5.000		103	90-110		
Fluoride	5.19	mg/L		5.000		104	90-110		
Chloride	5.08	mg/L		5.000		102	90-110		
Matrix Spike (B349006-MS1)				Sample: GK00898-01		Prepared & Analyzed: 11/10/23			
Sulfate	2.41	mg/L	Q1	1.500	ND	160	80-120		
Chloride	< 1.0	mg/L	Q4	1.500	46	NR	80-120		
Fluoride	1.30	mg/L		1.500	ND	86	80-120		
Matrix Spike Dup (B349006-MSD1)				Sample: GK00898-01		Prepared & Analyzed: 11/10/23			
Fluoride	1.29	mg/L		1.500	ND	86	80-120	0.6	20
Sulfate	2.39	mg/L	Q2	1.500	ND	159	80-120	0.8	20
Chloride	< 1.0	mg/L	Q4	1.500	46	NR	80-120		20
<u>Batch B349286 - No Prep - SM 2320B 1997</u>									
Duplicate (B349286-DUP1)				Sample: GK00654-01		Prepared & Analyzed: 11/15/23			
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO3	300	mg/L			312			4	10

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B349543 - No Prep - SM 2540C</u>									
Blank (B349543-BLK1)				Prepared & Analyzed: 11/17/23					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B349543-BS1)				Prepared & Analyzed: 11/17/23					
Solids - total dissolved solids (TDS)	950	mg/L		1000		95	84.9-109		
Duplicate (B349543-DUP1)				Prepared & Analyzed: 11/17/23					
Solids - total dissolved solids (TDS)	995	mg/L			1040			5	5
Duplicate (B349543-DUP2)				Prepared & Analyzed: 11/17/23					
Solids - total dissolved solids (TDS)	1190	mg/L	M		1080			10	5

NOTES

Specifications regarding method revisions, method modifications, and calculations used for analysis are available upon request. Please contact your project manager.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050

TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615

TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553

Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)

Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807

USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050

Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Qualifiers

- M Analyte failed to meet the required acceptance criteria for duplicate analysis.
- Q1 Matrix Spike failed % recovery acceptance limits. The associated blank spike recovery was acceptable.
- Q2 Matrix Spike Duplicate failed % recovery acceptance limits. The associated blank spike recovery was acceptable.
- Q3 Matrix Spike/Matrix Spike Duplicate both failed % recovery acceptance limits. The associated blank spike recovery was acceptable.
- Q4 The matrix spike recovery result is unusable since the analyte concentration in the sample is greater than four times the spike level. The associated blank spike was acceptable.



Certified by: Diane Billings, Project Manager



SAR-3: Episodic Depth to Groundwater Measurements
All DTWs on SAR-3 must be collected within 24 hours.

Plant: EDW
Event: EDW-23Q4 Rev 0

Well	Unique ID	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
AP05S	EDW_AP05#S	10/27/23	1610	6.23		BG
AP07S	EDW_AP07#S		1413	25.38		
AP08	EDW_AP08		1342	9.10		
AP09	EDW_AP09		1331	10.82		
APW-01	EDW_APW-01		1612	5.73		
AW-01	EDW_AW-01		1501	10.12		
AW-05	EDW_AW-05		1317	8.43		
AW-06	EDW_AW-06		1455	27.48		
AW-08	EDW_AW-08		1506	25.41		
AW-09	EDW_AW-09		1531	27.29		
AW-10	EDW_AW-10		1512	2.33		
AW-11	EDW_AW-11		1517	7.03		
AW-14	EDW_AW-14		1520	8.30		
AW-15	EDW_AW-15		1522	10.02		
AW-15S	EDW_AW-15#S		1524	10.04		
AW-16	EDW_AW-16		1439	25.92		
AW-17	EDW_AW-17		1435	26.56		
AW-18	EDW_AW-18		1431	28.00		
AW-19	EDW_AW-19		1351	19.16		
AW-20	EDW_AW-20		1356	17.10		
AW-21	EDW_AW-21		1359	17.80		
AW-23	EDW_AW-23		1625	5.46		
EMW-05	EDW_EMW-05		1448	21.67		

SAR-3: Episodic Depth to Groundwater Measurements

All DTWs on SAR-3 must be collected within 24 hours.

Plant: EDW

Event: EDW-23Q4 Rev 0

Well	Unique ID	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
OW-01	EDW_OW-01	10/27/23	1415	24.22		BG
OW-02	EDW_OW-02		1526	9.71		
PTW-01	EDW_PTW-01		1410	25.94		
PTW-02	EDW_PTW-02		1522	9.42		
XPW01A	EDW_XPW01A_pore		1346	11.89		
XPW02	EDW_XPW02_pore		1340	21.63		
XPW03	EDW_XPW03_pore		1335	18.23		
SG-01	EDW_YILRIVER		1546	34.43	431 BG 11/6/23	
SG-02	EDW_YSG-02		1426	447.5	SG Not in Water	
SG-03	EDW_YSG-03	—	1352	449.1		

U:6/21/23 GKJ

SAR-4: Depth to Groundwater Measurements - On-site Transducer Downloads
All DTWs on SAR-4 form may be collected at anytime during the sampling event.
 Plant: EDW
 Event: EDW-23Q4 Rev 0

Well	Unique ID	Date	Time	Measured Depth to Water (ft bmp)	Data Logger Serial No.	On-site Transducer Data					Comments	Initials
						Does Data Logger Serial No. Match?	WL Reading on Transducer (ft)	Data down-loaded?	Batt (H/M/L/R)			
AP05S	EDW_AP05#S	10/27/23	1610	6.23	21629301	No Transducer	N/A	N	N/A		BG	
AP07S	EDW_AP07#S		1413	25.38	21615552							
AW-01	EDW_AW-01		1501	10.12	21615144							
AW-05	EDW_AW-05		1317	8.43	21615132							
AW-06	EDW_AW-06		1455	27.48	21615127							
AW-08	EDW_AW-08		1506	25.41	21615722							
AW-09	EDW_AW-09		1531	27.29	21615130							
AW-10	EDW_AW-10		1512	2.33	21615754							
AW-11	EDW_AW-11		1517	7.03	21615129							
AW-15	EDW_AW-15		1522	10.02	21615761							
AW-15S	EDW_AW-15#S		1524	10.04	21629298							
AW-16	EDW_AW-16		1439	25.92	21615714							
AW-17	EDW_AW-17		1435	26.56	21615756							
AW-18	EDW_AW-18		1431	28.00	21615763							
AW-19	EDW_AW-19		1351	19.10	21615718							
AW-21	EDW_AW-21		1359	17.80	21615514							
EMW-05	EDW_EMW-05		1448	21.67	21615739							

SAR-4: Depth to Groundwater Measurements - On-site Transducer Downloads
All DTWs on SAR-4 form may be collected at anytime during the sampling event.
 Plant: EDW
 Event: EDW-23Q4 Rev 0

Well	Unique ID	Date	Time	Measured Depth to Water (ft bmp)	Data Logger Serial No.	On-site Transducer Data					Comments	Initials
						Does Data Logger Serial No. Match?	WL Reading on Transducer (ft)	Data down-loaded?	Batt (H/M/L/R)			
XPW01A	EDW_XPW01A_pore	0/22/23	1346	11.89	21615740	No Transducer	N/A	N	N/A			BG
XPW02	EDW_XPW02_pore		1340	21.63	21615752							
XPW03	EDW_XPW03_pore		1335	18.23	21629300							
SG-01	EDW_YILRIVER		1546	34.43	TBD							

U: 6/21/23 GKJ

Notes:

- Batt = battery
- bmp = below measuring point
- ft = feet
- H = high
- L = low
- M = medium
- R = replaced

Site: Edwards Ash Pond

WELL/SAMPLE POINT AP05S

Purge Method: Desiccated pump

Date: 11/6/2023 Start Time: 10:04 Finish/Sample Time: 11:00

Well Depth (Bottom) From MP: — ft Min. Purge Volume: — Gal / L

Depth to Water From MP: 6.30 ft Total Purge Volume: 1000 Gal / L (1000)

Water Column Length: — ft Max Drawdown: — ft

Well Water Volume: — Gal / L Total Drawdown: 0.15 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	10:26	6.45	200	6.80	1660	15.77	-123	1.61	561
2	10:28	6.45	200	6.80	1660	15.73	-126	1.54	529
3	10:30	6.45	200	6.80	1670	15.65	-127	1.49	531
4									
5									
Stabilization	NA	NA	NA	±0.2	±3%	±0.2	±20	±10% or 0.2	NA

Field Meter: Horiba

Sample Appearance: App 11/6/23

Odor: None Slight Mod. Strong

Color: None Slight Mod. Strong

Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Casing locked/secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well cap fits securely.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Good seal/drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well has weep holes	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) <u>1000mL</u>
1	<u>RAS CP, 2.5L, HNO3</u>

(4)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 500mL) <u>1000mL</u>

Final DTU 6.45 CL
 Ferrous Iron mg/L

Comments New pump installed to water level being stable pumped at 200ml/min due

Sampler's Signature: [Signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-05

Purge Method: Dedicated Pump

Date: 11/6/2023 Start Time: 13:27 Finish/Sample Time: 15:47

Well Depth (Bottom) From MP: - ft Min. Purge Volume: - Gal / L

Depth to Water From MP: 8.68 ft Total Purge Volume: 1000 Gal / L

Water Column Length: - ft Max Drawdown: - ft

Well Water Volume: - Gal / L Total Drawdown: 0.47 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1518	9.15	200	6.84	1730	17.23	-39	1.64	787
2	1520	9.15	200	6.85	1730	17.29	-40	1.55	746
3	1522	9.15	200	6.85	1730	17.30	-42	1.48	699
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: M0116n

Sample Appearance: App 11/6/23

Odor: None Slight Mod. Strong
 Color: None Slight Mod. Strong
 Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	✓	
Casing locked/secure	✓	
Well cap fits securely.	✓	
Good seal/drainage	✓	
Well has weep holes	✓	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) 1000 mL
1	ROS (P, 250 mL, HNO3)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 500 mL) 1000 mL

Final DTW 9.15 FL
~~Ferrous Iron~~ mg/L

Comments: Pumped at 200 mL/min due to stable water level

Sampler's Signature: [Signature]

WELL/SAMPLE POINT AW-06

Purge Method: Bladder pump

Date: 11/6/23 Start Time: 1132 Finish/Sample Time: 1250

Well Depth (Bottom) From MP: pump ft Min. Purge Volume: 1.0 Gal / L

Depth to Water From MP: 27.43 ft Total Purge Volume: 1.3 Gal / L

Water Column Length: - ft Max Drawdown: - ft

Well Water Volume: - Gal / L Total Drawdown: 6.88 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1149	28.90	100	7.47	1120	16.10	-84	1.85	776
2	1150	29.05	100	7.45	1130	16.09	-88	1.76	644
3	1151	29.20	100	7.41	1120	16.09	-91	1.59	609
4	<i>[Scribbled out]</i>								
5	<i>[Scribbled out]</i>								
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: None Slight Mod. Strong

Color: None Slight Mod. Strong

Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Casing locked/secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well cap fits securely.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Good seal/drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well has weep holes	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) 1000mL
1	Rad 2.5L

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 250 mL) 1000mL

~~Ferrous Iron~~ 34.31 ^{ft.}/_{mg/L}
 Final DTW

Comments 2

Sampler's Signature: Joseph R Paul

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-08

Purge Method: submersible pump

Date: 11/6/23 Start Time: 1500 Finish/Sample Time: 1613

Well Depth (Bottom) From MP: 59.96 ft Min. Purge Volume: 1.0 Gal L

Depth to Water From MP: 25.49 ft Total Purge Volume: 1.5 Gal B

Water Column Length: 34.53 ft Max Drawdown: — ft

Well Water Volume: 20.91 Gal/L Total Drawdown: 0.30 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1520	25.71	150	7.39	1610	18.60	-129	0.09	41000
2	1521	25.71	150	7.35	1590	18.60	-141	0.05	41000
3	1522	25.71	150	7.32	1550	18.58	150	0.01	41000
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

B6 11/7/23
>1000
>1000
>1000

Field Meter: Horiba

Sample Appearance:
Odor: None Slight Mod. Strong
Color: None Slight Mod. Strong
Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Casing locked/secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well cap fits securely	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Good seal/drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well has weep holes	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL)
1	Bad 2.5L

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 250mL) 1000mL

Erroneous Iron 25.73 mg/L
Final DTW — ft.

Comments _____

Sampler's Signature: [Signature]

WELL/SAMPLE POINT **AW-09**

Purge Method: Bladder pump

Date: 11/6/23 Start Time: 1005 Finish/Sample Time: 1115

Well Depth (Bottom) From MP: Pump ft Min. Purge Volume: 1.0 Gal L

Depth to Water From MP: 27.17 ft Total Purge Volume: 1.3 Gal L

Water Column Length: — ft Max Drawdown: — ft

Well Water Volume: — Gal / L Total Drawdown: 7.84 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1020	28.39	100	7.19	1450	16.95	-109	2.08	399
2	1021	28.55	100	7.11	1470	16.93	-109	1.92	290
3	1022	28.70	100	7.07	1480	16.89	-110	1.80	234
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: None Slight Mod. Strong

Color: None Slight Mod. Strong

Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Casing locked/secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well cap fits securely.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Good seal/drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well has weep holes	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) 1000 mL
1	Rad 2.5 L

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 250 mL) 1000 mL

Ferrous Iron 35.01 mg/L

End DTW
35.01

Comments: no recharge

Sampler's Signature: Joseph R. Pal

BG

WELL/SAMPLE POINT **AW-10**

Purge Method: submersible pump

Date: 11/6/23 Start Time: 1300 Finish/Sample Time: 1440

Well Depth (Bottom) From MP: 33.43 ft ^{+0.07} 3350 Min. Purge Volume: 1.0 Gal / 0

Depth to Water From MP: 2.39 ft Total Purge Volume: 1.3 Gal / L

Water Column Length: 31.04 ft Max Drawdown: - ft

Well Water Volume: 18.80 Gal / L Total Drawdown: 0.02 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1404	2.39	150	7.44	2220	17.90	-131	1.91	471
2	1405	2.40	150	7.34	2200	17.82	-126	1.77	506
3	1406	2.40	150	7.31	2190	17.78	-125	1.63	520
4	[Handwritten scribble]								
5	[Handwritten scribble]								
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:
 Odor: None Slight Mod. Strong
 Color: None Slight Mod. Strong
 Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	X	
Casing locked/secure	X	
Well cap fits securely.	X	
Good seal/drainage	X	
Well has weep holes	X	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) <u>1000mL</u>
	Rad <u>2.5L</u>

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 250mL) <u>1000mL</u>

Ferrous Iron 2.41 ft / mg/L
Final Dtw

Comments _____

Sampler's Signature: Joseph R Reed

Site: **Edwards Ash Pond**

WELL/SAMPLE POINT AW-11

Purge Method: Descental pump

Date: 11/3/2023 Start Time: 1320 Finish/Sample Time: 1410

Well Depth (Bottom) From MP: — ft Min. Purge Volume: — Gal / L

Depth to Water From MP: 6.90 ft Total Purge Volume: 1000 Gal / L (m)

Water Column Length: — ft Max Drawdown: ✓ ft

Well Water Volume: — Gal / L Total Drawdown: 0.10 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1338	7.00	200	6.88	1840	14.88	-143	2.09	201
2	1340	7.00	200	6.88	1840	14.86	-145	2.00	182
3	1342	7.00	200	6.89	1850	14.80	-148	1.90	169
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: None Slight Mod. Strong

Color: None Slight Mod. Strong

Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Casing locked/secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well cap fits securely.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Good seal/drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well has weep holes	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) 1000mL
1	Res (P, 250mL, HNO3)


(4)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P,500mL) 1000mL

Final DTU Ferrous-iron 7.00 µg/L

Comments well purged at 200mL/min due to stable water level

Sampler's Signature: _____



WELL/SAMPLE POINT AW-14

Purge Method: Dedicated pump

Date: 11/3/2023 Start Time: 1154 Finish/Sample Time: 1314

Well Depth (Bottom) From MP: - ft Min. Purge Volume: - Gal/L

Depth to Water From MP: 7.82 ft Total Purge Volume: 1000 Gal/L (mL)

Water Column Length: - ft Max Drawdown: - ft

Well Water Volume: - Gal/L Total Drawdown: 7.98 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1208	9.64	100	6.76	1830	14.45	-126	1.80	337
2	1210	9.75	100	6.76	1840	14.50	-127	1.66	340
3	1212	9.84	100	6.76	1840	14.52	-128	1.64	330
4	_____								
5	_____								
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HoriBa

Sample Appearance:

Odor: None Slight Mod. Strong
 Color None Slight Mod. Strong
 Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	✓	
Casing locked/secure	✓	
Well cap fits securely.	✓	
Good seal/drainage	✓	
Well has weep holes	✓	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) 1000mL
1	RA8 (P, 2.5L, HNO3)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 500mL) 1000mL

Final DW Ferrous Iron 15.80 DL mg/L

Comments very poor recharge

Sampler's Signature: [Signature]

WELL/SAMPLE POINT AW-15

Purge Method: Bladder By 11/2/23

Date: 11/2/23 Start Time: 1200 Finish/Sample Time: 1301319

Well Depth (Bottom) From MP: ft
 Min. Purge Volume: 1.5 Gal (L)
 Depth to Water From MP: 10.11 ft
 Total Purge Volume: 1.5 Gal (L)
 Water Column Length: ft
 Max Drawdown: ft
 Well Water Volume: Gal / L
 Total Drawdown: 0.15 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1215	10.28	100	6.96	1933	13.91	-94	0.0	2.8
2	1216	10.27	100	6.97	1951	13.95	-94	0.0	2.6
3	1217	10.27	100	6.98	1948	13.98	-95	0.0	2.5
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba U-5000

Sample Appearance:

Odor: None Slight Mod. Strong
 Color: None Slight Mod. Strong
 Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	✓	
Casing locked/secure	✓	
Well cap fits securely.	✓	
Good seal/drainage	✓	
Well has weep holes	✓	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) JL
1	Rad (P, 2.5L, HNO3)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 500mL) JL

Final DTW 10.26 ft
 Ferrous Iron mg/L

Comments

Sampler's Signature: Brandon Glenn

WELL/SAMPLE POINT AW-15

Purge Method: Bladder

Date: 11/17/23 Start Time: 1051 Finish/Sample Time: 1113

Well Depth (Bottom) From MP: 38.84 ft Top of Pump Min. Purge Volume: 1.5 Gal/⓪

Depth to Water From MP: 9.98 ft Total Purge Volume: 1.6 Gal/⓪

Water Column Length: 28.86 ft Max Drawdown: - ft

Well Water Volume: 17.48 Gal/⓪ Total Drawdown: 0.20 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1101	10.18	100	6.80	1980	14.51	-02	0.55	19.7
2	1104	10.18	100	6.78	1980	14.60	-112	0.47	31.0
3	1107	10.18	100	6.77	1980	14.68	-116	0.39	4.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba U-5000

Sample Appearance:

Odor: None Slight Mod. Strong

Color: None Slight Mod. Strong

Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Casing locked/secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well cap fits securely.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Good seal/drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well has weep holes	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
<u>1</u>	General (P, 250 mL) <u>500</u>

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW 10.18

Comments

Sampler's Signature: Brendan Bluma

WELL/SAMPLE POINT AW-15S

Purge Method: Bladder

Date: 11/2/23 Start Time: 1320 Finish/Sample Time: 1431

Well Depth (Bottom) From MP: ft
 Min. Purge Volume: 1.5 Gal
 Depth to Water From MP: 9.86 ft
 Total Purge Volume: 1.5 Gal
 Water Column Length: ft
 Max Drawdown: ft
 Well Water Volume: Gal / L
 Total Drawdown: 3.49 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1335	10.78	100	6.96	1788	16.19	0	0.0	1.7
2	1336	10.82	100	6.97	1790	16.16	1	0.0	1.8
3	1337	10.86	100	6.96	1795	16.09	1	0.0	1.6
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Hanna U-5000

Sample Appearance:
 Odor: None Slight Mod. Strong
 Color: None Slight Mod. Strong
 Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Casing locked/secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well cap fits securely.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Good seal/drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well has weep holes	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) 1 L
1	Rad (P, 2.5L, HNO3)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 500 mL) 1 L

Comments: Ferrous Iron mg/L
Final Depth 13.35

Sampler's Signature: Brendan [Signature]

WELL/SAMPLE POINT AW-15S

Purge Method: Bladder

Date: 11/17/23 Start Time: 1114 Finish/Sample Time: 1137

Well Depth (Bottom) From MP: 18.35 ft Top of Pump Min. Purge Volume: 1.5 Gal / L

Depth to Water From MP: 10.35 ft Total Purge Volume: 1.6 Gal (L)

Water Column Length: 8.00 ft Max Drawdown: - ft

Well Water Volume: 4.84 Gal (L) Total Drawdown: 0.94 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1124	11.02	100	6.89	1820	15.45	-35	1.12	96.5
2	1127	11.08	100	6.88	1820	15.51	-34	1.07	84.1
3	1130	11.16	100	6.87	1820	15.56	-34	0.98	60.5
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Hanna V-5000

Sample Appearance:

Odor: None Slight Mod. Strong

Color: None Slight Mod. Strong

Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Casing locked/secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well cap fits securely.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Good seal/drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well has weep holes	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) 500

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW 11.29

Comments

Sampler's Signature: Bowden Allen

Site: **Edwards Ash Pond**

WELL/SAMPLE POINT AW-16

Purge Method: Dedicated pump

Date: 11/2/2023 Start Time: 1130 Finish/Sample Time: 1330

Well Depth (Bottom) From MP: — ft Min. Purge Volume: — Gal / L

Depth to Water From MP: 26.00 ft Total Purge Volume: 1000 Gal / L (mL)

Water Column Length: — ft Max Drawdown: — ft

Well Water Volume: — Gal (L) Total Drawdown: 0.80 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1150	26.45	100	6.71	2180	14.61	-125	0.91	0.0
2	1152	26.45	100	6.70	2180	14.62	-126	0.89	0.0
3	1153/1154	26.45	100	6.71	2180	14.64	-126	0.86	0.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: None Slight Mod. Strong

Color: None Slight Mod. Strong

Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Casing locked/secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well cap fits securely.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Good seal/drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well has weep holes	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
121	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
121	General (P, 250 mL) 1000mL
121	Lead (P, 250 mL, HNO3)

(424)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
121	General (P, 500mL) 1000mL

Filtered Ferrous Iron 26.80 mg/L

Comments Field Dup killed here

Sampler's Signature: _____



WELL/SAMPLE POINT AW-16

Purge Method: Bladder

Date: 11/17/23 Start Time: 1010 Finish/Sample Time: 1043

Well Depth (Bottom) From MP: 56.78 ft Top of Pump Min. Purge Volume: 1.5 Gal

Depth to Water From MP: 26.03 ft Total Purge Volume: 1.9 Gal

Water Column Length: 30.75 ft Max Drawdown: — ft

Well Water Volume: 18.6 Gal Total Drawdown: 0.81 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1020	26.86	100	6.85	2130	14.07	-80	2.75	12.3
2	1023	26.74	100	6.80	2140	13.99	-95	0.87	22.1
3	1026	26.75	100	6.76	2150	13.91	-111	0.76	24.7
4	1029	26.76	100	6.75	2160	13.85	-115	0.71	20.6
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

86
11/17/23

Field Meter: Horiba U-5000

Sample Appearance:

Odor: None Slight Mod. Strong

Color: None Slight Mod. Strong

Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign		
Casing locked/secure		
Well cap fits securely.		
Good seal/drainage		
Well has weep holes		

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1 + 1	General (P, 250 mL) 500

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW 26.84

Comments Field Dupe filled here

Sampler's Signature: Brendan Allen

WELL/SAMPLE POINT AW-17

Purge Method: Dedicated pump

Date: 10/11/2023 Start Time: 1020 Finish/Sample Time: 1133

Well Depth (Bottom) From MP: ft
 Min. Purge Volume: Gal / L
 Depth to Water From MP: 26.80 ft
 Total Purge Volume: 1000 Gal / L (mL)
 Water Column Length: ft
 Max Drawdown: ft
 Well Water Volume: Gal / L
 Total Drawdown: 1.50 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1036	27.65	100	6.80	1850	12.93	-109	0.96	119
2	1038	27.70	100	6.80	1840	13.03	-113	0.92	122
3	1040	27.72	100	6.80	1840	13.07	-115	0.88	118
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:
 Odor: None Slight Mod. Strong
 Color: None Slight Mod. Strong
 Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Casing locked/secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well cap fits securely.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Good seal/drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well has weep holes	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BOTTLE INFORMATION: App 11/1/23

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1 +	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) 1000mL
1	Res (P, 250 mL, HNO3)

(5)
(4)

Filtered	
Qty	Bottles
+	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 500mL) 1000 mL

Final D_{EW} Ferrous Iron 28.30 FL mg/L

Comments _____

Sampler's Signature: _____

WELL/SAMPLE POINT AW-18

Purge Method: Deaerated pump

Date: 11/1/2023 Start Time: 1136 Finish/Sample Time: 1255

Well Depth (Bottom) From MP: ft Min. Purge Volume: Gal / L

Depth to Water From MP: 28.03 ft Total Purge Volume: 1000 Gal / L (ml)

Water Column Length: ft Max Drawdown: ft

Well Water Volume: Gal / L Total Drawdown: 4.35 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1156	29.50	100	6.84	1820	13.43	-108	0.96	166
2	1158	29.60	100	6.84	1830	13.43	-109	0.91	152
3	1200	29.70	100	6.84	1840	13.43	-111	0.88	149
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: 14016n

Sample Appearance:
 Odor: None Slight Mod. Strong
 Color: None Slight Mod. Strong
 Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Casing locked/secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well cap fits securely.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Good seal/drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well has weep holes	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>1000mL</u>
1	Rad (P, 2.5L, HNO3)

4

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P,500mL) <u>1000mL</u>

Final DTW AV
 Ferrous Iron 32.38 mg/L

Comments _____

Sampler's Signature: [Signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-19

Purge Method: Desiccated pump

Date: 11/1/2023 Start Time: 1303 Finish/Sample Time: 1412

Well Depth (Bottom) From MP: ft Min. Purge Volume: Gal / L

Depth to Water From MP: 14.19 ft Total Purge Volume: 1000 Gal / L (mL)

Water Column Length: ft Max Drawdown: ft

Well Water Volume: Gal / L Total Drawdown: 3.4 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1318	16.05	100	7.06	1140	14.44	-67	1.07	84.8
2	1320	16.00	100	7.06	1140	14.47	-67	1.05	85.0
3	1322	16.10	100	7.05	1140	14.45	-66	1.00	79.1
4									
5									
Stabilization	NA	NA	NA	±0.2	±3%	±0.2	±20	±10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: None Slight Mod. Strong

Color: None Slight Mod. Strong

Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Casing locked/secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well cap fits securely.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Good seal/drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well has weep holes	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) 1000 mL
1	RAE (P 2.5L, HNO3)

(4)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 500 mL) 1000 mL

Final DTW 17.33 ft
 Ferrous Iron mg/L

Comments

Sampler's Signature: [Signature]

WELL/SAMPLE POINT AW-21

Purge Method: Dedicated pump

Date: 11/2/2023 Start Time: 1345 Finish/Sample Time: 1310

Well Depth (Bottom) From MP: — ft Min. Purge Volume: — Gal / L

Depth to Water From MP: 17.69 ft Total Purge Volume: 1000 Gal / L (mL)

Water Column Length: — ft Max Drawdown: — ft

Well Water Volume: — Gal / L Total Drawdown: 0.65 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1405	18.30	100	7.15	1100	15.27	57	2.58	20.5
2	1407	18.32	100	7.16	1100	15.31	49	2.49	20.2
3	1408	18.34	100	7.16	1100	15.42	46	2.39	20.0
4	_____								
5	_____								
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: None Slight Mod. Strong

Color None Slight Mod. Strong

Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	✓	
Casing locked/secure	✓	
Well cap fits securely.	✓	
Good seal/drainage	✓	
Well has weep holes	✓	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) (1000mL)
1	ROX (P, 250 mL, HNO3)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 500mL) (1000mL)

Final DTW 18.34 AL
 Ferrous Iron mg/L

Comments

Sampler's Signature: _____



WELL/SAMPLE POINT AW-21

Purge Method: Bladder

Date: 11/17/23 Start Time: 0935 Finish/Sample Time: 1003

Well Depth (Bottom) From MP: 33.50 ft Top of Pump Min. Purge Volume: 1.5 Gal 0

Depth to Water From MP: 17.78 ft Total Purge Volume: 1.8 Gal 0

Water Column Length: 15.72 ft Max Drawdown: - ft

Well Water Volume: 9.5 Gal 0 Total Drawdown: 0.89 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	0949	18.60	100	7.27	1080	14.28	198	3.91	10.1
2	0952	18.64	100	7.22	1080	14.18	196	2.74	7.0
3	0955	18.64	100	7.19	1080	14.10	194	1.99	0.3
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba U-5000

Sample Appearance:

Odor: None Slight Mod. Strong

Color: None Slight Mod. Strong

Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	X	
Casing locked/secure		X
Well cap fits securely.	X	
Good seal/drainage	X	
Well has weep holes	X	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
<u>1</u>	General (P, 250 -mL) <u>500</u>

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW 18.67

Comments

Sampler's Signature: Brandon Allen

Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Aaron Pemberton</u>				Location: <u>Edwards</u>					
Weather: <u>42° Sunny</u> <u>win sw am</u>				Environment: <u>grass, gravel, dirt</u>					
Multiparameter Water Meter		Make: <u>Hori:bn</u>	Model: <u>V5000</u>	Serial Number: <u>6US83085</u>					
Water Level Meter		Make: <u>Solinst</u>	Model: <u>101</u>	Serial Number: <u>33459</u>					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.09</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>6.97</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>10.00</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	022361-01	12/27/2024
SC Zero (DI)	<u>10</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>NO</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2080</u>	µS/cm	±5%	<u>P</u>	<u>NO</u>	<u>N/A</u>	Geotech	3GF1197	Jun-24
ORP	<u>237</u>	mV	±15 mV	<u>P</u>	<u>NO</u>	<u>N/A</u>	InSitu	3GD927	Jan-24
DO (Zero pt)	<u>0.08</u>	mg/L	±0.1	<u>P</u>	<u>NO</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>19.2</u>	%	97-100%	<u>P</u>	<u>NO</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>NO</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

241 @ 16°C

ICV (Initial Calibration Verification)						Time: <u>0920</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>4.08</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N/A</u>	Geotech	3GB1049	Feb-25	
pH 7.00b	<u>6.95</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N/A</u>	Geotech	2GF113	Jun-24	
pH 10.00b	<u>10.06</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N/A</u>	Geotech	3GA1134	Jan-25	
SC 1000	<u>1020</u>	µS/cm	±5%	<u>P</u>	<u>N/A</u>	Ricca	4209A12	Aug-24	

Approx. every 4 hrs, unless only one well

AP 11/11/23

CCV (Continued Calibration Verification):						Time: <u>1451</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.06</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>7.02</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>10.05</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	022361-01	12/27/2024
SC 1000	<u>1010</u>	µS/cm	±5%	<u>P</u>	<u>NO</u>	<u>N/A</u>	Ricca	4209A12	Aug-24
DO (Zero pt)	<u>0.09</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>NO</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>NO</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a	 	s.u.	±0.1 s.u.	 	 	 	MSI	023067-01	3/14/2025
7.00a	 	s.u.	±0.1 s.u.	 	 	 	MSI	023051-02	2/21/2025
10.00a	 	s.u.	±0.1 s.u.	 	 	 	MSI	022361-01	12/27/2024
SC 1000	 	µS/cm	±5%	 	 	 	Ricca	4209A12	Aug-24
DO (Zero pt)	 	mg/L	±0.1 mg/L	 	 	 	Macron	#000228049	8/26/2025
Turbidity (DI)	 	NTU	<2 NTU	 	 	 	Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: 	Date: <u>11/11/2023</u>
--	-------------------------

Multiparameter Meter Field Calibration Checklist

Field Personnel: <i>Aaron Pemberton</i>		Location: <i>Edwards</i>	
Weather: <i>High - 54° Sunny wind SW 10mph</i>		Environment: <i>grass, gravel, dirt</i>	
Multiparameter Water Meter	Make: <i>Horiba</i>	Model: <i>US000</i>	Serial Number: <i>605 83085</i>
Water Level Meter	Make: <i>Solis</i>	Model: <i>101</i>	Serial Number: <i>33459</i>

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<i>4.05</i>	s.u.	±0.1 s.u.	<i>P</i>	<i>NO</i>	<i>N/A</i>	MSI	023067-01	3/14/2025
pH 7.00a	<i>6.92</i>	s.u.	±0.1 s.u.	<i>P</i>	<i>I</i>	<i>I</i>	MSI	023051-02	2/21/2025
pH 10.00a	<i>9.92</i>	s.u.	±0.1 s.u.	<i>I</i>	<i>I</i>	<i>I</i>	MSI	022361-01	12/27/2024
SC Zero (DI)	<i>10</i>	µS/cm	0<25 µS/cm	<i>I</i>	<i>I</i>	<i>I</i>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<i>2060</i>	µS/cm	±5%	<i>I</i>	<i>I</i>	<i>I</i>	Geotech	3GF1197	Jun-24
ORP	<i>235</i>	mV	±15 mV	<i>I</i>	<i>I</i>	<i>I</i>	InSitu	3GD927	Jan-24
DO (Zero pt)	<i>0.05</i>	mg/L	±0.1	<i>I</i>	<i>I</i>	<i>I</i>	Macron	#000228049	8/26/2025
DO (Saturated)	<i>97.3</i>	%	97-100%	<i>I</i>	<i>I</i>	<i>I</i>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<i>0.0</i>	NTU	<2 NTU	<i>I</i>	<i>I</i>	<i>I</i>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

238 @ 1800

ICV (Initial Calibration Verification)					Time: <i>1113</i>				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<i>3.98</i>	s.u.	±0.15 s.u.	<i>P</i>	<i>N/A</i>	Geotech	3GB1049	Feb-25	
pH 7.00b	<i>6.87</i>	s.u.	±0.15 s.u.	<i>I</i>	<i>I</i>	Geotech	2GF113	Jun-24	
pH 10.00b	<i>9.96</i>	s.u.	±0.15 s.u.	<i>I</i>	<i>I</i>	Geotech	3GA1134	Jan-25	
SC 1000	<i>1010</i>	µS/cm	±5%	<i>I</i>	<i>I</i>	Ricca	4209A12	Aug-24	


Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: <i>1519</i>				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<i>4.00</i>	s.u.	±0.1 s.u.	<i>P</i>	<i>NO</i>	<i>N/A</i>	MSI	023067-01	3/14/2025
pH 7.00a	<i>7.03</i>	s.u.	±0.1 s.u.	<i>P</i>	<i>I</i>	<i>I</i>	MSI	023051-02	2/21/2025
pH 10.00a	<i>10.07</i>	s.u.	±0.1 s.u.	<i>I</i>	<i>I</i>	<i>I</i>	MSI	022361-01	12/27/2024
SC 1000	<i>1030</i>	µS/cm	±5%	<i>I</i>	<i>I</i>	<i>I</i>	Ricca	4209A12	Aug-24
DO (Zero pt)	<i>0.00</i>	mg/L	±0.1 mg/L	<i>I</i>	<i>I</i>	<i>I</i>	Macron	#000228049	8/26/2025
Turbidity (DI)	<i>0.0</i>	NTU	<2 NTU	<i>I</i>	<i>I</i>	<i>I</i>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a	 	s.u.	±0.1 s.u.	 	 	 	MSI	023067-01	3/14/2025
7.00a	 	s.u.	±0.1 s.u.	 	 	 	MSI	023051-02	2/21/2025
10.00a	 	s.u.	±0.1 s.u.	 	 	 	MSI	022361-01	12/27/2024
SC 1000	 	µS/cm	±5%	 	 	 	Ricca	4209A12	Aug-24
DO (Zero pt)	 	mg/L	±0.1 mg/L	 	 	 	Macron	#000228049	8/26/2025
Turbidity (DI)	 	NTU	<2 NTU	 	 	 	Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: 	Date: <i>11/2/2023</i>
--	------------------------

EG

Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Brendan Gleason</u>				Location: <u>Edwards</u>					
Weather: <u>41° Mostly Sunny 10 mph NE</u>				Environment: <u>Gravel Road</u>					
Multiparameter Water Meter		Make: <u>Horiba</u>	Model: <u>U-5000</u>	Serial Number: <u>PW2GV5D3</u>					
Water Level Meter		Make: <u>Heron</u>	Model: <u>Dipper-T</u>	Serial Number: <u>3717-T</u>					

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.00</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>6.98</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>9.99</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	022361-01	12/27/2024
SC Zero (DI)	<u>16</u>	µS/cm	0<25 µS/cm	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>1978</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Geotech	3GF1197	Jun-24
ORP	<u>248 @ 10.8°</u>	mV	±15 mV	<u>I</u>	<u>I</u>	<u>I</u>	InSitu	3GD927	Jan-24
DO (Zero pt)	<u>0.0</u>	mg/L	±0.1	<u>I</u>	<u>I</u>	<u>I</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>98.6</u>	%	97-100%	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: <u>1048</u>		
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	<u>3.98</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	Geotech	3GB1049	Feb-25
pH 7.00b	<u>6.87</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>	Geotech	2GF113	Jun-24
pH 10.00b	<u>10.01</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>	Geotech	3GA1134	Jan-25
SC 1000	<u>991</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	Ricca	4209A12	Aug-24

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: <u>1445</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.02</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>7.01</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>10.01</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	022361-01	12/27/2024
SC 1000	<u>1025</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Ricca	4209A12	Aug-24
DO (Zero pt)	<u>0.0</u>	mg/L	±0.1 mg/L	<u>I</u>	<u>I</u>	<u>I</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	023067-01	3/14/2025
7.00a		s.u.	±0.1 s.u.				MSI	023051-02	2/21/2025
10.00a		s.u.	±0.1 s.u.				MSI	022361-01	12/27/2024
SC 1000		µS/cm	±5%				Ricca	4209A12	Aug-24
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: <u>Brendan Gleason</u>	Date: <u>11/2/23</u>
-----------------------------------	----------------------

BG

Multiparameter Meter Field Calibration Checklist

Field Personnel:	Aaron Kimberlin			Location:	Edwards	
Weather:	45°-58° Sunny Wind SW 13 mph			Environment:	Grass, gravel, soil	
Multiparameter Water Meter	Make:	Hoviba	Model:	US000	Serial Number:	6US83C85
Water Level Meter	Make:	Heron	Model:	Dipart	Serial Number:	11FF2209305ML

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.99	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023067-01	3/14/2025
pH 7.00a	6.99	s.u.	±0.1 s.u.	P			MSI	023051-02	2/21/2025
pH 10.00a	9.94	s.u.	±0.1 s.u.	P			MSI	022361-01	12/27/2024
SC Zero (DI)	20	µS/cm	0<25 µS/cm	P			Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2020	µS/cm	±5%	P			Geotech	3GF1197	Jun-24
ORP	231	mV	±15 mV	P			InSitu	3GD927	Jan-24
DO (Zero pt)	0.09	mg/L	±0.1	P			Macron	#000228049	8/26/2025
DO (Saturated)	98.6	%	97-100%	P			Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	P			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

240 @ 17°C

ICV (Initial Calibration Verification)					Time:	0926		
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.00	s.u.	±0.15 s.u.	P	N/A	Geotech	3GB1049	Feb-25
pH 7.00b	6.87	s.u.	±0.15 s.u.	P		Geotech	2GF113	Jun-24
pH 10.00b	9.94 10.10	s.u.	±0.15 s.u.	P		Geotech	3GA1134	Jan-25
SC 1000	989	µS/cm	±5%	P		Ricca	4209A12	Aug-24


Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:	1415			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.03	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023067-01	3/14/2025
pH 7.00a	7.01	s.u.	±0.1 s.u.	P			MSI	023051-02	2/21/2025
pH 10.00a	10.05	s.u.	±0.1 s.u.	P			MSI	022361-01	12/27/2024
SC 1000	993	µS/cm	±5%	P			Ricca	4209A12	Aug-24
DO (Zero pt)	0.09	mg/L	±0.1 mg/L	P			Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	P			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a	/	s.u.	±0.1 s.u.	/	/	/	MSI	023067-01	3/14/2025
7.00a	/	s.u.	±0.1 s.u.	/	/	/	MSI	023051-02	2/21/2025
10.00a	/	s.u.	±0.1 s.u.	/	/	/	MSI	022361-01	12/27/2024
SC 1000	/	µS/cm	±5%	/	/	/	Ricca	4209A12	Aug-24
DO (Zero pt)	/	mg/L	±0.1 mg/L	/	/	/	Macron	#000228049	8/26/2025
Turbidity (DI)	/	NTU	<2 NTU	/	/	/	Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature:		Date:	11/3/2023
------------	---	-------	-----------

Multiparameter Meter Field Calibration Checklist

Field Personnel: Logan Ross			Location: EDWARDS POWERSTATION						
Weather: CLOUDY 4P-6° 16mph S			Environment: GRASSLAND						
Multiparameter Water Meter		Make: HORIBA	Model: U-5000	Serial Number: PW26YJD3					
Water Level Meter		Make: HERRON	Model: differ-t	Serial Number: 377-T					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.67	s.u.	±0.1 s.u.	F	Y	4.00	MSI	023067-01	3/14/2025
pH 7.00a	6.98	s.u.	±0.1 s.u.	P	N	NA	MSI	023051-02	2/21/2025
pH 10.00a	10.08	s.u.	±0.1 s.u.	P	N	NA	MSI	022361-01	12/27/2024
SC Zero (DI)	0.0	µS/cm	0<25 µS/cm	P	N	NA	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1920	µS/cm	±5%	P	N	NA	Geotech	3GF1197	Jun-24
ORP	271	mV	±15 mV	F	Y	241	InSitu	3GD927	Jan-24
DO (Zero pt)	.00	mg/L	±0.1	P	N	NA	Macron	#000228049	8/26/2025
DO (Saturated)	98.7	%	97-100%	P	N	NA	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	P	N	NA	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)

Time: **0845**

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	3.98	s.u.	±0.15 s.u.	P	NA	Geotech	3GB1049	Feb-25
pH 7.00b	7.02	s.u.	±0.15 s.u.	P	NA	Geotech	2GF113	Jun-24
pH 10.00b	9.80	s.u.	±0.15 s.u.	P	NA	Geotech	3GA1134	Jan-25
SC 1000	1040	µS/cm	±5%	P	NA	Ricca	4209A12	Aug-24

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):

Time: **151**

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.02	s.u.	±0.1 s.u.	P	N	NA	MSI	023067-01	3/14/2025
pH 7.00a	6.92	s.u.	±0.1 s.u.	P	N	NA	MSI	023051-02	2/21/2025
pH 10.00a	9.97	s.u.	±0.1 s.u.	P	N	NA	MSI	022361-01	12/27/2024
SC 1000	1040	µS/cm	±5%	P	N	NA	Ricca	4209A12	Aug-24
DO (Zero pt)	0.0	mg/L	±0.1 mg/L	P	N	NA	Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	P	N	NA	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):

Time:

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a	 	s.u.	±0.1 s.u.	 	 	 	MSI	023067-01	3/14/2025
7.00a	 	s.u.	±0.1 s.u.	 	 	 	MSI	023051-02	2/21/2025
10.00a	 	s.u.	±0.1 s.u.	 	 	 	MSI	022361-01	12/27/2024
SC 1000	 	µS/cm	±5%	 	 	 	Ricca	4209A12	Aug-24
DO (Zero pt)	 	mg/L	±0.1 mg/L	 	 	 	Macron	#000228049	8/26/2025
Turbidity (DI)	 	NTU	<2 NTU	 	 	 	Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: 

Date: **11/3/23**

Multiparameter Meter Field Calibration Checklist

Field Personnel: <i>Aaron Pemberton</i>			Location: <i>Edwards</i>		
Weather: <i>62° - 69° Wind SW 4-5 mph</i>			Environment: <i>to grass gravel</i>		
Multiparameter Water Meter	Make: <i>Heron</i>	Model: <i>VS000</i>	Serial Number: <i>W0683185</i>		
Water Level Meter	Make: <i>Heron</i>	Model: <i>D:port</i>	Serial Number: <i>3717-T</i>		

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<i>4.08</i>	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023067-01	3/14/2025
pH 7.00a	<i>7.06</i>	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023051-02	2/21/2025
pH 10.00a	<i>10.02</i>	s.u.	±0.1 s.u.	P	NO	N/A	MSI	022361-01	12/27/2024
SC Zero (DI)	<i>20</i>	µS/cm	0 < 25 µS/cm	P	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<i>1950</i>	µS/cm	±5%	P	NO	N/A	Geotech	3GF1197	Jan-24
ORP	<i>226</i>	mV	±15 mV	P	NO	N/A	InSitu	3GD927	Jan-24
DO (Zero pt)	<i>0.04</i>	mg/L	±0.1	P	NO	N/A	Macron	#000228049	8/26/2025
DO (Saturated)	<i>10.2</i>	%	97-100%	P	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<i>0.0</i>	NTU	< 2 NTU	P	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: <i>0941</i>	<i>23.6 @ 20°C</i>		
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<i>4.02</i>	s.u.	±0.15 s.u.	P	N/A	Geotech	3GB1049	Feb-25	
pH 7.00b	<i>7.05</i>	s.u.	±0.15 s.u.	P	N/A	Geotech	2GF113	Jun-24	
pH 10.00b	<i>10.03</i>	s.u.	±0.15 s.u.	P	N/A	Geotech	3GA1134	Jan-25	
SC 1000	<i>1010</i>	µS/cm	±5%	P	N/A	Ricca	4209A12	Aug-24	

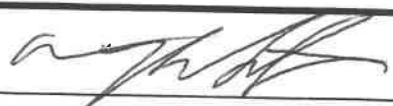
Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: <i>1558</i>			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<i>4.03</i>	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023067-01	3/14/2025
pH 7.00a	<i>7.01</i>	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023051-02	2/21/2025
pH 10.00a	<i>10.05</i>	s.u.	±0.1 s.u.	P	NO	N/A	MSI	022361-01	12/27/2024
SC 1000	<i>1030</i>	µS/cm	±5%	P	NO	N/A	Ricca	4209A12	Aug-24
DO (Zero pt)	<i>0.09</i>	mg/L	±0.1 mg/L	P	NO	N/A	Macron	#000228049	8/26/2025
Turbidity (DI)	<i>0.0</i>	NTU	< 2 NTU	P	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.	P	NO	N/A	MSI	023067-01	3/14/2025
7.00a		s.u.	±0.1 s.u.	P	NO	N/A	MSI	023051-02	2/21/2025
10.00a		s.u.	±0.1 s.u.	P	NO	N/A	MSI	022361-01	12/27/2024
SC 1000		µS/cm	±5%	P	NO	N/A	Ricca	4209A12	Aug-24
DO (Zero pt)		mg/L	±0.1 mg/L	P	NO	N/A	Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	< 2 NTU	P	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: 	Date: <i>11/6/2023</i>
--	------------------------

Multiparameter Meter Field Calibration Checklist

Field Personnel: Joe Reed			Location: Edward Power Station						
Weather: 55-70°F mostly sunny			Environment: Muddy/grassy						
Multiparameter Water Meter	Make: Horiba	Model: V5000	Serial Number: Y29KJ9HA						
Water Level Meter	Make: Horin	Model: Series 1900	Serial Number: 19FF211192HB						
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.05	s.u.	±0.1 s.u.	P	N	/	MSI	023067-01	3/14/2025
pH 7.00a	6.98	s.u.	±0.1 s.u.	P	N		MSI	023051-02	2/21/2025
pH 10.00a	10.07	s.u.	±0.1 s.u.	P	N		MSI	022361-01	12/27/2024
SC Zero (DI)	2	µS/cm	0<25 µS/cm	P	N		Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2010	µS/cm	±5%	P	N		Geotech	3GF1197	Jun-24
ORP	241	mV	±15 mV	P	N		InSitu	3GD927	Jan-24
DO (Zero pt)	0.05	mg/L	±0.1	P	N		Macron	#000228049	8/26/2025
DO (Saturated)	99.7	%	97-100%	P	N		Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	P	N		Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time:	940			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.		
pH 4.00b	4.00	s.u.	±0.15 s.u.	P	N	Geotech	3GB1049	Feb-25		
pH 7.00b	6.97	s.u.	±0.15 s.u.	P	N	Geotech	2GF113	Jun-24		
pH 10.00b	10.05	s.u.	±0.15 s.u.	P	N	Geotech	3GA1134	Jan-25		
SC 1000	1050	µS/cm	±5%	P	N	Ricca	4209A12	Aug-24		


Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:	1630			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.	
pH 4.00a	4.07	s.u.	±0.1 s.u.	P	N	/	MSI	023067-01	3/14/2025	
pH 7.00a	7.03	s.u.	±0.1 s.u.	P	N		MSI	023051-02	2/21/2025	
pH 10.00a	10.05	s.u.	±0.1 s.u.	P	N		MSI	022361-01	12/27/2024	
SC 1000	1010	µS/cm	±5%	P	N		Ricca	4209A12	Aug-24	
DO (Zero pt)	0.01	mg/L	±0.1 mg/L	P	N		Macron	#000228049	8/26/2025	
Turbidity (DI)	0.0	NTU	<2 NTU	P	N		Pace Labs	N/A (DI)	N/A (DI)	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.	
4.00a		s.u.	±0.1 s.u.				MSI	023067-01	3/14/2025	
7.00a		s.u.	±0.1 s.u.				MSI	023051-02	2/21/2025	
10.00a		s.u.	±0.1 s.u.				MSI	022361-01	12/27/2024	
SC 1000		µS/cm	±5%				Ricca	4209A12	Aug-24	
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025	
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)	

Comments:

Signature:		Date:	11/6/23
------------	---	-------	----------------

BG

Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Brendan Gleason</u>				Location: <u>Edwards</u>			
Weather: <u>4/8° Sunny 13mph S</u>				Environment: <u>Grassy field</u>			
Multiparameter Water Meter		Make: <u>Hanna</u>	Model: <u>U-5000</u>	Serial Number: <u>WUG83C 85</u>			
Water Level Meter		Make: <u>Heron</u>	Model: <u>Dipper-T</u>	Serial Number: <u>3717-T</u>			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.07</u>	s.u.	±0.1 s.u.	P	N	N/A	MSI	023067-01	3/14/2025
pH 7.00a	<u>6.96</u>	s.u.	±0.1 s.u.	P	N	N/A	MSI	023051-02	2/21/2025
pH 10.00a	<u>9.97</u>	s.u.	±0.1 s.u.	P	N	N/A	MSI	022361-01	12/27/2024
SC Zero (DI)	<u>14</u>	µS/cm	0<25 µS/cm	P	N	N/A	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2040</u>	µS/cm	±5%	P	N	N/A	Geotech	3GF1197	Jun-24
ORP	<u>2200mV</u>	mV	±15 mV	P	N	N/A	InSitu	3GD927	Jan-24
DO (Zero pt)	<u>0.07</u>	mg/L	±0.1	P	N	N/A	Macron	#000228049	8/26/2025
DO (Saturated)	<u>99.1</u>	%	97-100%	P	N	N/A	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	P	N	N/A	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)

				Time: <u>11:17/23</u>					
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>4.09</u>	s.u.	±0.15 s.u.	P	N	Geotech	3GB1049	Feb-25	
pH 7.00b	<u>6.97</u>	s.u.	±0.15 s.u.	P	N	Geotech	2GF113	Jun-24	
pH 10.00b	<u>9.92</u>	s.u.	±0.15 s.u.	P	N	Geotech	3GA1134	Jan-25	
SC 1000	<u>1020</u>	µS/cm	±5%	P	N	Ricca	4209A12	Aug-24	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):

				Time: <u>11:40</u>					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.08</u>	s.u.	±0.1 s.u.	P	N	N/A	MSI	023067-01	3/14/2025
pH 7.00a	<u>7.01</u>	s.u.	±0.1 s.u.	P	N	N/A	MSI	023051-02	2/21/2025
pH 10.00a	<u>9.95</u>	s.u.	±0.1 s.u.	P	N	N/A	MSI	022361-01	12/27/2024
SC 1000	<u>1030</u>	µS/cm	±5%	P	N	N/A	Ricca	4209A12	Aug-24
DO (Zero pt)	<u>0.07</u>	mg/L	±0.1 mg/L	P	N	N/A	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	P	N	N/A	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):

				Time:					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a	/	s.u.	±0.1 s.u.	/	/	/	MSI	023067-01	3/14/2025
7.00a	/	s.u.	±0.1 s.u.	/	/	/	MSI	023051-02	2/21/2025
10.00a	/	s.u.	±0.1 s.u.	/	/	/	MSI	022361-01	12/27/2024
SC 1000	/	µS/cm	±5%	/	/	/	Ricca	4209A12	Aug-24
DO (Zero pt)	/	mg/L	±0.1 mg/L	/	/	/	Macron	#000228049	8/26/2025
Turbidity (DI)	/	NTU	<2 NTU	/	/	/	Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: <u>Brendan Gleason</u>	Date: <u>11/17/23</u>
-----------------------------------	-----------------------

6600258

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A
 Required Client Information
 Company: **Visira Corp-Edwards**
 Address: **7800 Cilco Lane**
 Peoria, IL 61607
 Email To: Brian.Voelker@VisiraCorp.com
 Phone: **(217) 753-8911**
 Fax: _____
 Requested Due Date/TAT: **10 day**

Section B
 Required Project Information
 Report To: **Brian Voelker**
 Copy To: **Sam.Davies.samantha.davies@vistracorp.com**
 Mark.Davis.Mark.Davis1@vistracorp.com
 Purchase Order No.: _____
 Project Name: _____
 Project Number: **2285**

Section C
 Invoice Information
 Attention: **Mark Davis**
 Company Name: **Visira Corp-Edwards**
 Address: **see Section A**
 Quote Reference: _____
 Project Manager: _____
 Profile #: _____

REGULATORY AGENCY
 NPDES GROUND WATER DRINKING WATER
 UST RCRA OTHER

Site Location IL

ITEM #	Valid Matrix Codes MATRIX CODE		SAMPLE TYPE (G-GRAB C-COMP)	COLLECTED		# OF CONTAINERS	Preservatives										Requested Analysis Filtered (Y/N)	Project No./ Lab I.D.					
	DRINKING WATER	WASTE WATER		DATE	TIME		Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ O ₂	Methanol	Other	Analysis Test	EDW-257-301			EDW-845-301	EDW-SUP-000	EDW-PGMP-301		
1	AW-05S																						
2	AP07S																						
3	APW-01																						
4	AW-01																						
5	AW-05																						
6	AW-06																						
7	AW-08																						
8	AW-09																						
9	AW-10																						
10	AW-11																						
11	AW-14																						
12	AW-15																						
13	AW-15S																						
14	AW-16																						
15	AW-17																						
16	AW-18																						
		ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS							
		EDW-23Q4-Rev 0		[Signature]		11/1/23		1600		[Signature]		11/1/23		1600		Received on		Temp in °C					
		SAMPLER NAME AND SIGNATURE		DATE SIGNED		SIGNATURE OF SAMPLER:		DATE SIGNED		SIGNATURE OF SAMPLER:		DATE SIGNED		SIGNATURE OF SAMPLER:		DATE SIGNED							
		[Signature]		11/1/23		[Signature]		1600		[Signature]		11/1/23		1600		Received on		Temp in °C					
		[Signature]		11/1/23		[Signature]		1600		[Signature]		11/1/23		1600		Received on		Temp in °C					

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A
 Required Client Information
 Company: **Vistra Corp-Edwards**
 Address: **7800 Clico Lane**
 Peoria, IL 61607
 Email To: **Brian.Voelker@VistraCorp.com**
 Phone: **(217) 753-8911** Fax:
 Requested Due Date/TAT: **10 day**

Section B
 Required Project Information
 Report To: **Brian Voelker**
 Copy To: **Sam Davis-samantha.davies@vistracorp.com**
 Mark Davis-Mark.Davis1@vistracorp.com
 Purchase Order No:
 Project Name:
 Project Number: **2285**

Section C
 Invoice Information
 Attention: **Mark Davis**
 Company Name: **Vistra Corp-Edwards**
 Address: **see Section A**
 Quote Reference:
 Project Manager:
 Profile #

Section D
 Required Client Information
 REGULATORY AGENCY
 NPDES: GROUND WATER: **DRINKING WATER**
 UST: RCRA: OTHER:
 Site Location: **IL**
 STATE:

ITEM #	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WASTE WATER WW PRODUCT P SOLID/SOLID SL OIL WIPE WIP AW OTHER OT TISSUE TS	SAMPLE TYPE (G-GRAB C-COMP)	DATE	TIME	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Requested Analysis Filtered (Y/N)			Project No. / Lab ID.			
											Y	N	Analysis Test				
1	AW-19	W76	11/11/23	1412		11/11/23	1609				EDW-257-301						
2	AW-20	W76	11/11/23	1536		11/11/23	1609				EDW-845-301						
3	AW-21										EDW-SUP-000						
4	AW-23										EDW-PGMP-301						
5	EMW-05																
12	Field Blank																
13																	
14																	
15																	
16																	

ADDITIONAL COMMENTS
EDW-23Q4-Rev 0

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER: **Agaton Rembecker**
 SIGNATURE of SAMPLER: *[Signature]*
 DATE Signed (MM/DD/YY): **11/11/2023**

EDWARDS POWER PLANT, ASH POND
EDW-845-301

Page: 1 of 2

Section A
Required Client Information:
Company: Visira Corp-Edwards
Address: 7800 Cilco Lane
Peoria, IL 61607
Email To: Brian.Voelker@VisiraCorp.com
Phone: (217) 753-8911 Fax:
Requested Due Date/TAT: 10 day

Section B
Required Project Information:
Report To: Brian Voelker
Copy To: Sam Davies-samantha.davies@visiracorp.com
Mark Davis-Mark.Davis1@visiracorp.com
Purchase Order No.:
Project Name:
Project Number: 2285

Section C
Invoice Information:
Attention: Mark Davis
Company Name: Visira Corp-Edwards
Address: see Section A
Quote References:
Project Manager:
Profile #:

REGULATORY AGENCY
NPDES
UST
RCRA
OTHER
GROUND WATER
DRINKING WATER

Site Location
STATE: IL

GK004777
gog

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL OL WIPE WP AIR AR OTHER OT TRUSS TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		# OF CONTAINERS	Preservatives Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	Requested Analysis Filtered (Y/N)	Project No./ Lab I.D.
					DATE	TIME				
1	AP05S									
2	AP07S									
3	APW-01									
4	AW-01									
5	AW-05									
6	AW-06									
7	AW-08									
8	AW-09									
9	AW-10									
10	AW-11									
11	AW-14									
12	AW-15									
13	AW-15S									
14	AW-16									
15	AW-17									
16	AW-18									

ADDITIONAL COMMENTS
EDW-23Q4-Rev 0

RELINQUISHED BY / AFFILIATION: [Signature] DATE: 11/2/23 TIME: 1600

ACCEPTED BY / AFFILIATION: [Signature] DATE: 11/2/23 TIME: 1600

Temp in °C: 14.9 Received on: 11/2/23 Custody Sealed Cooler (Y/N): N Samples Intact (Y/N): Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Adrian Penabazcan DATE Signed (MM/DD/YYYY): 11/02/23
SIGNATURE of SAMPLER: [Signature]

EDWARDS POWER PLANT, ASH POND
EDW-845-301

Section A
Required Client Information:
Company: **Visira Corp-Edwards**
Address: **7800 Cilco Lane**
Peoria, IL 61607
Email To: **Brian.Voelker@VisiraCorp.com**
Phone: **(217) 753-8911** Fax:
Requested Due Date/TAT: **10 day**

Section B
Required Project Information:
Report To: **Brian Voelker**
Copy To: **Sam Davies-samantha.davies@visitracorp.com**
Project Name: **Mark Davis-Mark.Davis1@visitracorp.com**
Purchase Order No.:
Project Number: **2285**

Section C
Invoice Information:
Attention: **Mark Davis**
Company Name: **Visira Corp-Edwards**
Address: **see Section A**
Quote Reference:
Project Manager:
Profile #:

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WASTE WATER WW PRODUCT P SOL/SOLID SL OIL OL WIFE WF AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	ACCEPTED BY / AFFILIATION	DATE	TIME	Requested Analysis Filtered (Y/N)	Project No. / Lab I.D.
					DATE	TIME								
1														
2														
3			WT 6	G	11/22/23	1310		4	X					
4														
5														
12			WT 6	G	11/22/23	1315		4	X					
13			WT 6	G	11/22/23	1338		4	X					
14														
15														
16														

ADDITIONAL COMMENTS
EDW-23Q4-Rev 0

RELINQUISHED BY / AFFILIATION: *[Signature]* DATE: 11/22/23 TIME: 1600

ACCEPTED BY / AFFILIATION: *[Signature]* DATE: 11/22/23 TIME: 1600

Temp in °C: **14.5** Received on Ice (Y/N): **Y** Custody Sealed Cooler (Y/N): **N** Samples Intact (Y/N): **Y**

SAMPLER NAME AND SIGNATURE: *[Signature]*
PRINT Name of SAMPLER: **Aaron Rembertson**
SIGNATURE of SAMPLER: *[Signature]*
DATE Signed (MM/DD/YY): **11/02/23**

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 2

Section A
Required Client Information:
Company: Vistra Corp-Edwards
Address: 7800 Cilco Lane
Peoria, IL 61607
Email To: Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911
Requested Due Date/TAT: 10 day

Section B
Required Project Information:
Report To: Brian Voelker
Copy To: Sam Davies-samantha.davies@vistracorp.com
Mark Davis-Mark.Davis1@vistracorp.com
Purchase Order No.:
Project Name:
Project Number: 2285

Section C
Invoice Information:
Attention: Mark Davis
Company Name: Vistra Corp-Edwards
Address: see Section A
Quote Reference:
Project Manager:
Profile #:

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL OL WIPE WP WAX WX OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		# OF CONTAINERS	Preservatives Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	Requested Analysis Filtered (Y/N)	Project No./ Lab I.D.
					DATE	TIME				
1										
2			WT G	G	11/3/23	1320	4	X		
3										
4										
5										
6										
7										
8										
9										
10			WT G	G	11/3/23	1410	4	X		
11			WT G	G	11/3/23	1314	4	X		
12										
13										
14										
15										
16										

ADDITIONAL COMMENTS
EDW-23Q4-Rev 0

RELINQUISHED BY / AFFILIATION: [Signature] DATE: 11/3/23 TIME: 1503

ACCEPTED BY / AFFILIATION: [Signature] DATE: 11/3/23 TIME: 1503

Temp in C: 10.7

Received on Ice (Y/N): Y

Custody Sealed Cooler (Y/N): N

Samples Intact (Y/N): Y

SAMPLER NAME AND SIGNATURE: [Signature]
PRINT Name of SAMPLER: [Name]
SIGNATURE of SAMPLER: [Signature]

DATE Signed (MM/DD/YYYY): 11/03/23

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:	Page: 2 of 2
Company: Vistra Corp-Edwards	Report To: Brian Voelker	Attention: Mark Davis	
Address: 7800 Cilco Lane	Copy To: Sam Davies-samantha.davies@vistracorp.com	Company Name: Vistra Corp-Edwards	
Peoria, IL 61607	Mark Davis-Mark.Davis1@vistracorp.com	Address: see Section A	
Email To: Brian.Voelker@VistraCorp.com	Purchase Order No.:	Quote Reference:	
Phone: (217) 753-8911	Project Name:	Project Manager:	
Fax:	Project Number: 2285	Profile #:	
Requested Due Date/TAT: 10 day			

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WASTE WATER WW PRODUCT P LIQUID L SOLID S WIFE W AIR AR OTHER OT TISSUE TS	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		# OF CONTAINERS	Preservatives Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	Y/N	Requested Analysis Filtered (Y/N)	Project No./ Lab I.D.
				DATE	TIME					
1	AW-19									
2	AW-20									
3	AW-21									
4	AW-23		W-6	11/3/23	1130	4	X			
5	EMW-05		W-6	11/3/23	1143	4	X			
12	Field Blank									
13										
14										
15										
16										

ADDITIONAL COMMENTS EDW-23Q4-Rev 0	RELINQUISHED BY / AFFILIATION <i>[Signature]</i>	DATE 11/3/23	TIME 1503
ACCEPTED BY / AFFILIATION <i>[Signature]</i>			
DATE 11/3/23			
TIME 1503			
Temp in °C 10.7			
Received on Ice (Y/N) N			
Custody Sealed Cooler (Y/N) N			
Samples Intact (Y/N) Y			

GK00898

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: Vistra Corp-Edwards		Report To: Brian Voelker		Attention: Mark Davis	
Address: 7800 Cilco Lane		Copy To: Sam Davies-samantha.davies@vistracorp.com		Company Name: Vistra Corp-Edwards	
Peoria, IL 61607		Mark Davis-Mark.Davis1@vistracorp.com		Address: see Section A	
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:	
Phone: (217) 753-8911 Fax:		Project Name:		Project Reference:	
Requested Due Date/TAT: 10 day		Project Number: 2285		Project Manager:	
				Profile #:	
				Site Location: IL	
				STATE:	
				NPDES: GROUND WATER	
				UST: DRINKING WATER	
				RCRA: OTHER	
				Residual Chlorine (Y/N)	

ITEM #	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WASTE WATER WT WATER PRODUCT P SOL/SOLID SL W WIFE WR AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Y/N	Requested Analysis Filtered (Y/N)	Project No./ Lab I.D.										
				DATE	TIME			H ₂ SO ₄	Unpreserved	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	EDW-257-301	EDW-845-301				EDW-SUP-000	EDW-PGMP-301								
1	AP05S	WT 6	G	11/6/23	1100		4	X																						
2	AP07S	WT 6	G	11/6/23	1210		4	X																						
3	APW-01	WT 6	G	11/6/23	1440		4	X																						
4	AW-01	WT 6	G	11/6/23	1547		4	X																						
5	AW-05	WT 6	G	11/6/23	1250		4	X																						
6	AW-06	WT 6	G	11/6/23	1613		4	X																						
7	AW-08	WT 6	G	11/6/23	1115		4	X																						
8	AW-09	WT 6	G	11/6/23	1440		4	X																						
9	AW-10	WT 6	G	11/6/23			4	X																						
10	AW-11																													
11	AW-14																													
12	AW-15																													
13	AW-15S																													
14	AW-16																													
15	AW-17																													
16	AW-18																													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on	Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-23Q4-Rev 0		11/6/23	1704		11/6/23	1710	5.4	Y	Y	Y	Y

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER: Anton Amberton	DATE Signed (MM/DD/YYYY): 11/6/23
SIGNATURE of SAMPLER:	

6400808

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A
Required Client Information:

Company: Vistra Corp-Edwards
 Address: 7800 Cicco Lane
Peoria, IL 61607
 Email To: Brian.Voelker@VistraCorp.com
 Phone: (217) 763-8911 Fax:
 Requested Due Date/TAT: 10 day

Section B
Required Project Information:

Report To: Brian Voelker
 Copy To: Sam Davies-samantha.davies@vistracorp.com
Mark Davis-Mark.Davis1@vistracorp.com
 Purchase Order No.:
 Project Name:
 Project Number: 2285

Section C
Invoice Information:

Attention: Mark Davis
 Company Name: Vistra Corp-Edwards
 Address: see Section A
 Quote Reference:
 Project Manager:
 Profile #:

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX	MATRIX CODE (see yield codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		# OF CONTAINERS	Preservatives Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	Requested Analysis Filtered (Y/N)	Project No./ Lab I.D.
					DATE	TIME				
1	AW-19	DRINKING WATER WATER WASTE WATER PRODUCT SOLID WIFE AIR OTHER TISSUE								
2	AW-20									
3	AW-21									
4	AW-23									
5	EMW-05 Field Blank									
13	AW-01 Dup		WT6		11/6/23	1440	4	X	EDW-257-301	
14	Equipment Blank 1		WT6		11/6/23	1645	4	X	EDW-845-301	
15									EDW-SUP-000	
16									EDW-PGMP-301	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-23Q4-Rev 0		11/6/23	1709		11/6/23	1710	5.1	Y	Y	Y

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER:
 SIGNATURE of SAMPLER:
 DATE Signed (MM/DD/YYYY): 11/06/23

EDW-845-301

6K03315
GS

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A
Required Client Information:
Company: **Vistra Corp-Edwards**
Address: 7800 Cicco Lane
Peoria, IL 61607
Email To: **Brian.Voelker@VistraCorp.com**
Phone: (217) 753-8911 Fax
Requested Due Date/TAT: **10 day**

Section B
Required Project Information:
Report To: **Brian Voelker**
Copy To: **Sam Davies-samantha.davies@vistracorp.com**
Mark Davis-Mark.Davis1@vistracorp.com
Purchase Order No.:
Project Name:
Project Number: 2285

Section C
Invoice Information:
Attention: **Mark Davis**
Company Name: **Vistra Corp-Edwards**
Address: **see Section A**
Quote Reference:
Project Manager:
Profile #

Section D
Required Client Information:
NPDES: **GROUND WATER** DRINKING WATER
UST: **RORA** OTHER
Site Location: **IL**
STATE: **IL**

# ITEM	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL OL WIPE WP AIR AR OTHER OT ISSUE IS	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		# OF CONTAINERS	Preservatives Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	Requested Analysis Filtered (Y/N)	Project No./ Lab I.D.
			DATE	TIME				
1	AW-15	GW	11/17/23	1113	1		EDW-257-301	
2	AW-15S	GW	11/17/23	1137	1		EDW-PGMF-301	
3	AW-16	GW	1043		1		EDW-845-301	
4	AW-16 FD	GW	1043		1		EDW-APT-301	
5	AW-21	GW	1003		1			
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice (Y/N)	Custody Sealed (Y/N)	Samples Intact (Y/N)
EDW-23Q4-Rev 1	<i>Brendan Blane</i>	11/17/23	10:12	<i>[Signature]</i>	11/17/23	12:12	13.8	Y	N	Y
SAMPLER NAME AND SIGNATURE		PRINT Name of SAMPLER: <i>Brendan Blane</i>		DATE Signed (MM/DD/YYYY): <i>11/17/23</i>						
		SIGNATURE of SAMPLER: <i>[Signature]</i>								



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

December 14, 2023

Brian Voelker
Vistra - Edwards
604 Pierce Boulevard
O'Fallon, IL 62269

Dear Brian Voelker:

Please find enclosed the analytical results for the sample(s) the laboratory received. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of Pace Analytical Services, LLC.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

Pace Analytical Services appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the General Manager, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Sincerely,

A handwritten signature in black ink that reads "Diane Billings". The signature is written in a cursive, flowing style.

Diane Billings
Project Manager

SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order GK00259

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
YES	Zero headspace, <6 mm present in VOA vials
YES	Trip blank(s) received
YES	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided

Work Order GK00479

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
YES	Zero headspace, <6 mm present in VOA vials
YES	Trip blank(s) received
YES	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided

Work Order GK00657

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided

Work Order GK00902

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
YES	Zero headspace, <6 mm present in VOA vials
YES	Trip blank(s) received
YES	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided

ANALYTICAL RESULTS

Sample: GK00259-01
Name: AW-17
Matrix: Ground Water - Grab

Sampled: 11/01/23 11:33
Received: 11/01/23 16:09

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	2.75	pCi/L			1	0.699	11/21/23 14:19	PACE	904.0 903.0

Sample: GK00259-02
Name: AW-18
Matrix: Ground Water - Grab

Sampled: 11/01/23 12:55
Received: 11/01/23 16:09

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	4.06	pCi/L			1	0.713	11/21/23 14:19	PACE	904.0 903.0

Sample: GK00259-03
Name: AW-19
Matrix: Ground Water - Grab

Sampled: 11/01/23 14:12
Received: 11/01/23 16:09

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.982	pCi/L			1	0.531	11/21/23 14:19	PACE	904.0 903.0

Sample: GK00259-04
Name: AW-20
Matrix: Ground Water - Grab

Sampled: 11/01/23 15:36
Received: 11/01/23 16:09

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.72	pCi/L			1	0.741	11/21/23 14:19	PACE	904.0 903.0

ANALYTICAL RESULTS

Sample: GK00479-01
Name: AW-15
Matrix: Ground Water - Grab

Sampled: 11/02/23 13:19
Received: 11/02/23 16:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	5.52	pCi/L			1	0.628	11/22/23 21:28	PACE	904.0 903.0

Sample: GK00479-02
Name: AW-15S
Matrix: Ground Water - Grab

Sampled: 11/02/23 14:31
Received: 11/02/23 16:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.7	pCi/L			1	0.511	11/22/23 21:28	PACE	904.0 903.0

Sample: GK00479-03
Name: AW-16
Matrix: Ground Water - Grab

Sampled: 11/02/23 13:38
Received: 11/02/23 16:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	3.93	pCi/L			1	0.657	11/22/23 21:28	PACE	904.0 903.0

Sample: GK00479-04
Name: AW-21
Matrix: Ground Water - Grab

Sampled: 11/02/23 13:10
Received: 11/02/23 16:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.26	pCi/L			1	0.537	11/22/23 21:28	PACE	904.0 903.0

ANALYTICAL RESULTS

Sample: GK00479-05
Name: FIELD BLANK
Matrix: DI Water - Field Blank

Sampled: 11/02/23 13:15
Received: 11/02/23 16:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.04	pCi/L			1	0.593	11/22/23 21:28	PACE	904.0 903.0

Sample: GK00479-06
Name: AW-16 FD
Matrix: Ground Water - Field Duplicate

Sampled: 11/02/23 13:38
Received: 11/02/23 16:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	4.6	pCi/L			1	0.749	11/22/23 21:28	PACE	904.0 903.0

Sample: GK00657-01
Name: AP07S
Matrix: Ground Water - Grab

Sampled: 11/03/23 13:20
Received: 11/03/23 15:03

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.02	pCi/L			1	0.523	12/12/23 14:33	PACE	904.0 903.0

Sample: GK00657-02
Name: AW-11
Matrix: Ground Water - Grab

Sampled: 11/03/23 14:10
Received: 11/03/23 15:03

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.94	pCi/L			1	0.533	12/12/23 14:33	PACE	904.0 903.0

ANALYTICAL RESULTS

Sample: GK00657-03
Name: AW-14
Matrix: Ground Water - Grab

Sampled: 11/03/23 13:14
Received: 11/03/23 15:03

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.87	pCi/L			1	0.679	12/12/23 14:33	PACE	904.0 903.0

Sample: GK00657-04
Name: AW-23
Matrix: Ground Water - Grab

Sampled: 11/03/23 11:30
Received: 11/03/23 15:03

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.85	pCi/L			1	0.852	12/12/23 14:33	PACE	904.0 903.0

Sample: GK00657-05
Name: EMW-05
Matrix: Ground Water - Grab

Sampled: 11/03/23 11:43
Received: 11/03/23 15:03

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.519	pCi/L			1	0.439	12/12/23 14:33	PACE	904.0 903.0

Sample: GK00902-01
Name: AP05S
Matrix: Ground Water - Grab

Sampled: 11/06/23 11:00
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	3.94	pCi/L			1	0.861	12/12/23 14:33	PACE	904.0 903.0

ANALYTICAL RESULTS

Sample: GK00902-02
Name: APW-01
Matrix: Ground Water - Grab

Sampled: 11/06/23 12:10
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	3.7	pCi/L			1	0.78	12/12/23 14:33	PACE	904.0 903.0

Sample: GK00902-03
Name: AW-01
Matrix: Ground Water - Grab

Sampled: 11/06/23 14:40
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	4.72	pCi/L			1	0.694	12/12/23 14:33	PACE	904.0 903.0

Sample: GK00902-04
Name: AW-05
Matrix: Ground Water - Grab

Sampled: 11/06/23 15:47
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.465 J	pCi/L			1	0.48	12/12/23 14:33	PACE	904.0 903.0

Sample: GK00902-05
Name: AW-06
Matrix: Ground Water - Grab

Sampled: 11/06/23 12:50
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.785	pCi/L			1	0.438	12/12/23 14:33	PACE	904.0 903.0

ANALYTICAL RESULTS

Sample: GK00902-06
Name: AW-08
Matrix: Ground Water - Grab

Sampled: 11/06/23 16:13
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	29.1	pCi/L			1	1.29	12/12/23 14:33	PACE	904.0 903.0

Sample: GK00902-07
Name: AW-09
Matrix: Ground Water - Grab

Sampled: 11/06/23 11:15
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.35	pCi/L			1	0.565	12/12/23 14:33	PACE	904.0 903.0

Sample: GK00902-08
Name: AW-10
Matrix: Ground Water - Grab

Sampled: 11/06/23 14:40
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	3.58	pCi/L			1	1.15	12/12/23 14:33	PACE	904.0 903.0

Sample: GK00902-09
Name: AW-01 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 11/06/23 14:40
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.0339 U	pCi/L			1	0.604	12/12/23 14:33	PACE	904.0 903.0



Pace Analytical Services, LLC
 2231 W. Altorfer Drive
 Peoria, IL 61615
 (800)752-6651

ANALYTICAL RESULTS

Sample: GK00902-10
Name: EQUIPMENT BLANK 1
Matrix: DI Water - Equipment Blank

Sampled: 11/06/23 16:45
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
-----------	--------	------	-----------	----------	----------	-----	----------	---------	--------

Miscellaneous - Pace Analytical - Mt Juliet, Tn

Rad 226 and 228-Subcontract	0.846	pCi/L			1	0.48	12/12/23 14:33	PACE	904.0 903.0
-----------------------------	-------	-------	--	--	---	------	----------------	------	-------------

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
------------------	---------------	-------------	-------------	--------------------	----------------------	-------------	--------------------	------------	------------------

NOTES

Specifications regarding method revisions, method modifications, and calculations used for analysis are available upon request. Please contact your project manager.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050

TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615

TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553

Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)

Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807

USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050

Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050



Certified by: Diane Billings, Project Manager

ANALYTICAL REPORT

November 30, 2023

Pace IR - Peoria, IL

Sample Delivery Group: L1673770
Samples Received: 11/03/2023
Project Number: GK00259
Description:
Site: 01
Report To: Diane Billings
2231 W. Altorfer Drive
Peoria, IL 61615

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Entire Report Reviewed By:

Haley Torrence
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

15

TABLE OF CONTENTS

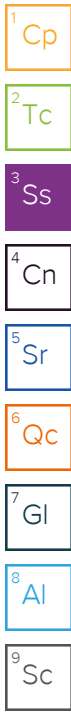
Cp: Cover Page	1	
Tc: Table of Contents	2	
Ss: Sample Summary	3	
Cn: Case Narrative	4	
Sr: Sample Results	5	
GK00259-01 L1673770-01	5	
GK00259-02 L1673770-02	6	
GK00259-03 L1673770-03	7	
GK00259-04 L1673770-04	8	
Qc: Quality Control Summary	9	
Radiochemistry by Method 904/9320	9	
Radiochemistry by Method SM7500Ra B M	10	
Gl: Glossary of Terms	11	
Al: Accreditations & Locations	12	
Sc: Sample Chain of Custody	13	

SAMPLE SUMMARY

GK00259-01 L1673770-01 Non-Potable Water

Collected by
 Collected date/time 11/01/23 11:33
 Received date/time 11/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2171834	1	11/15/23 22:43	11/21/23 14:19	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2166556	1	11/09/23 15:03	11/21/23 14:19	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2166556	1	11/09/23 15:03	11/13/23 17:48	RRE	Mt. Juliet, TN



GK00259-02 L1673770-02 Non-Potable Water

Collected by
 Collected date/time 11/01/23 12:55
 Received date/time 11/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2171834	1	11/15/23 22:43	11/21/23 14:19	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2166556	1	11/09/23 15:03	11/21/23 14:19	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2166556	1	11/09/23 15:03	11/13/23 17:48	RRE	Mt. Juliet, TN

GK00259-03 L1673770-03 Non-Potable Water

Collected by
 Collected date/time 11/01/23 14:12
 Received date/time 11/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2171834	1	11/15/23 22:43	11/21/23 14:19	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2166556	1	11/09/23 15:03	11/21/23 14:19	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2166556	1	11/09/23 15:03	11/13/23 17:48	RRE	Mt. Juliet, TN

GK00259-04 L1673770-04 Non-Potable Water

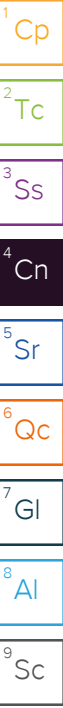
Collected by
 Collected date/time 11/01/23 15:36
 Received date/time 11/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2171834	1	11/15/23 22:43	11/21/23 14:19	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2166556	1	11/09/23 15:03	11/21/23 14:19	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2166556	1	11/09/23 15:03	11/13/23 17:48	RRE	Mt. Juliet, TN

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.



Haley Torrence
Project Manager



Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	1.90		0.404		0.664		11/21/2023 14:19	WG2171834
(T) Barium	109					30.0-143	11/21/2023 14:19	WG2171834
(T) Yttrium	114					30.0-136	11/21/2023 14:19	WG2171834

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	2.75		0.519	0.699	11/21/2023 14:19	WG2166556

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/g		+ / -	+ / -	pCi/g	pCi/g	date / time	
RADIUM-226	0.859		0.326	0.150	0.219	0.153	11/13/2023 17:48	WG2166556
(T) Barium-133	89.5					30.0-143	11/13/2023 17:48	WG2166556

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	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	3.10		0.439		0.696		11/21/2023 14:19	WG2171834
(T) Barium	119					30.0-143	11/21/2023 14:19	WG2171834
(T) Yttrium	115					30.0-136	11/21/2023 14:19	WG2171834

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	4.06		0.558	0.713	11/21/2023 14:19	WG2166556

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/g		+ / -	+ / -	pCi/g	pCi/g	date / time	
RADIUM-226	0.952		0.345	0.159	0.155	0.125	11/13/2023 17:48	WG2166556
(T) Barium-133	88.1					30.0-143	11/13/2023 17:48	WG2166556

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.449	J	0.299		0.515		11/21/2023 14:19	WG2171834
(T) Barium	111					30.0-143	11/21/2023 14:19	WG2171834
(T) Yttrium	99.4					30.0-136	11/21/2023 14:19	WG2171834

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.982		0.382	0.531	11/21/2023 14:19	WG2166556

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/g		+ / -	+ / -	pCi/g	pCi/g	date / time	
RADIUM-226	0.532		0.238	0.107	0.130	0.106	11/13/2023 17:48	WG2166556
(T) Barium-133	86.8					30.0-143	11/13/2023 17:48	WG2166556

- 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	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	1.17		0.430		0.728		11/21/2023 14:19	WG2171834
(T) Barium	113					30.0-143	11/21/2023 14:19	WG2171834
(T) Yttrium	94.9					30.0-136	11/21/2023 14:19	WG2171834

- 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	1.72		0.496	0.741	11/21/2023 14:19	WG2166556

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/g		+ / -	+ / -	pCi/g	pCi/g	date / time	
RADIUM-226	0.555		0.248	0.114	0.136	0.110	11/13/2023 17:48	WG2166556
(T) Barium-133	89.2					30.0-143	11/13/2023 17:48	WG2166556

Method Blank (MB)

(MB) R4005417-1 11/21/23 14:19

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.406		0.184	0.315	
(T) Barium	89.6		89.6		
(T) Yttrium	109		109		

L1673770-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1673770-04 11/21/23 14:19 • (DUP) R4005417-5 11/21/23 14:19

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	1.17	0.430	0.728		-0.0160	0.321	0.573		200	2.20	<u>U</u>	20	3
(T) Barium	113				105	105							
(T) Yttrium	94.9				118	118							

Laboratory Control Sample (LCS)

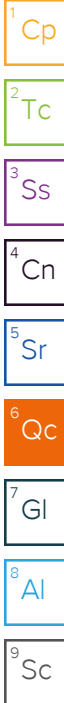
(LCS) R4005417-2 11/21/23 14:19

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.54	111	80.0-120	
(T) Barium			120		
(T) Yttrium			119		

L1673772-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673772-03 11/21/23 14:19 • (MS) R4005417-3 11/21/23 14:19 • (MSD) R4005417-4 11/21/23 14:19

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	0.591	16.6	18.0	96.0	104	1	70.0-130			7.86		20
(T) Barium		125			112	111							
(T) Yttrium		116			104	114							



EDW-845-301
Method Blank (MB)

(MB) R4005932-1 11/13/23 17:48

Analyte	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
	pCi/g		+ / -	pCi/g	pCi/g
Radium-226	0.00880	<u>U</u>	0.0323	0.0566	0.0350
(T) Barium-133	78.7		78.7		

L1673772-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1673772-03 11/13/23 17:48 • (DUP) R4005932-5 11/13/23 17:48

Analyte	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/g	+ / -	pCi/g	pCi/g	pCi/g	+ / -	pCi/g	pCi/g	%			%	
Radium-226	0.148	0.165	0.222	0.158	-0.107	0.210	0.429	0.269	200	0.956	<u>U</u>	20	3
(T) Barium-133	86.7				67.6	67.6							

Laboratory Control Sample (LCS)

(LCS) R4005932-2 11/13/23 17:48

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/g	pCi/g	%	%	
Radium-226	5.00	5.55	111	80.0-120	
(T) Barium-133			74.5		

L1664280-28 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1664280-28 11/13/23 17:48 • (MS) R4005932-3 11/13/23 17:48 • (MSD) R4005932-4 11/13/23 17:48

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/g	pCi/g	pCi/g	pCi/g	%	%		%			%		%
Radium-226	20.0	1.15	24.3	25.2	116	120	1	75.0-125			3.68		20
(T) Barium-133		63.1			70.0	57.1							

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gf

8 Al

9 Sc

Guide to Reading and Understanding Your Laboratory Report

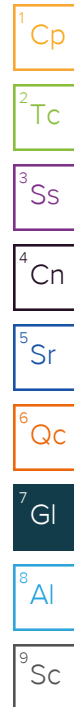
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

Abbreviations and Definitions

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

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



ACCREDITATIONS & LOCATIONS

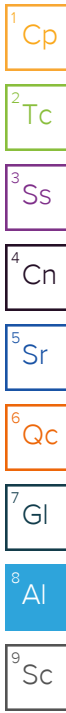
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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



SUBCONTRACT ORDER
Transfer Chain of Custody

A093

Pace Analytical Services, LLC
GK00259

SENDING LABORATORY

PDC Laboratories, Inc.
 2231 W Altorfer Dr
 Peoria, IL 61615
 (800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
 12065 Lebanon Rd
 Mt Juliet, TN 37122
 (615) 758-5858

U1673770

Sample: GK00259-01
Name: AW-17

Sampled: 11/01/23 11:33
Matrix: Ground Water
Preservative: HNO3, pH <2

61

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/14/23 16:00	04/29/24 11:33	need Ra-226 , Ra-228, total combined and QC forms

Sample: GK00259-02
Name: AW-18

Sampled: 11/01/23 12:55
Matrix: Ground Water
Preservative: HNO3, pH <2

62

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/14/23 16:00	04/29/24 12:55	need Ra-226 , Ra-228, total combined and QC forms

Sample: GK00259-03
Name: AW-19

Sampled: 11/01/23 14:12
Matrix: Ground Water
Preservative: HNO3, pH <2

63

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/14/23 16:00	04/29/24 14:12	need Ra-226 , Ra-228, total combined and QC forms

Sample: GK00259-04
Name: AW-20

Sampled: 11/01/23 15:36
Matrix: Ground Water
Preservative: HNO3, pH <2

64

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/14/23 16:00	04/29/24 15:36	need Ra-226 , Ra-228, total combined and QC forms

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC
GK00259

PH-10BDH4321 TRC 0352362
 CR6-20221V

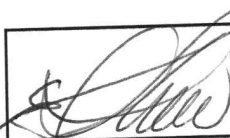
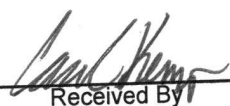
12.230 = 12.2 DP

Sample Receipt Checklist			
COC Seal Present/Intact:	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	If Applicable
COC signed/Accurate:	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Bottles arrive intact:	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Pres. Correct/Check: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Correct bottles used:	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
Sufficient volume sent:	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
RA Screen <0.5 mR/hr:	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	

703 7808 0285 Please email results to Diane Billings at diane.billings@pacelabs.com

Date Shipped: 11/2/23 Total # of Containers: 4 Sample Origin (State): IL PO #: _____

Turn-Around Time Requested NORMAL RUSH Date Results Needed: _____

	<u>11/2/23 10:25</u>		<u>11/3/23 9:00</u>	Sample Temperature Upon Receipt	_____ °C
Relinquished By	Date/Time	Received By	Date/Time	Sample(s) Received on Ice	Y or N
				Proper Bottles Received in Good Condition	Y or N
				Bottles Filled with Adequate Volume	Y or N
				Samples Received Within Hold Time	Y or N
				Date/Time Taken From Sample Bottle	Y or N
Relinquished By	Date/Time	Received By	Date/Time		

ANALYTICAL REPORT

December 04, 2023

Pace IR - Peoria, IL

Sample Delivery Group: L1674446
Samples Received: 11/06/2023
Project Number: GK00479
Description:

Report To: Diane Billings
2231 W. Altorfer Drive
Peoria, IL 61615

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Entire Report Reviewed By:

Haley Torrence
Project Manager

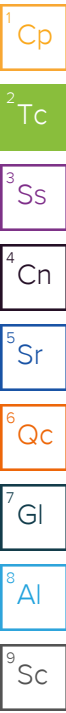
Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory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

Pace Analytical National

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

TABLE OF CONTENTS

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Sr: Sample Results	5
GK00479-01 L1674446-01	5
GK00479-02 L1674446-02	6
GK00479-03 L1674446-03	7
GK00479-04 L1674446-04	8
GK00479-05 L1674446-05	9
GK00479-06 L1674446-06	10
Qc: Quality Control Summary	11
Radiochemistry by Method 904/9320	11
Radiochemistry by Method SM7500Ra B M	12
Gl: Glossary of Terms	13
Al: Accreditations & Locations	14
Sc: Sample Chain of Custody	15

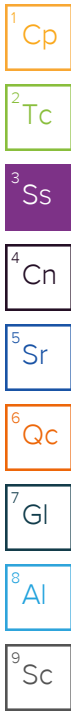


SAMPLE SUMMARY

GK00479-01 L1674446-01 Non-Potable Water

Collected by
Collected date/time
Received date/time
11/02/23 13:19 11/06/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2173611	1	11/17/23 23:39	11/22/23 21:28	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2169128	1	11/14/23 12:16	11/22/23 21:28	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2169128	1	11/14/23 12:16	11/16/23 12:04	RRE	Mt. Juliet, TN



GK00479-02 L1674446-02 Non-Potable Water

Collected by
Collected date/time
Received date/time
11/02/23 14:31 11/06/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2173611	1	11/17/23 23:39	11/22/23 21:28	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2169128	1	11/14/23 12:16	11/22/23 21:28	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2169128	1	11/14/23 12:16	11/16/23 12:04	RRE	Mt. Juliet, TN

GK00479-03 L1674446-03 Non-Potable Water

Collected by
Collected date/time
Received date/time
11/02/23 13:38 11/06/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2173611	1	11/17/23 23:39	11/22/23 21:28	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2169128	1	11/14/23 12:16	11/22/23 21:28	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2169128	1	11/14/23 12:16	11/16/23 12:04	RRE	Mt. Juliet, TN

GK00479-04 L1674446-04 Non-Potable Water

Collected by
Collected date/time
Received date/time
11/02/23 13:10 11/06/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2173611	1	11/17/23 23:39	11/22/23 21:28	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2169128	1	11/14/23 12:16	11/22/23 21:28	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2169128	1	11/14/23 12:16	11/16/23 12:04	RRE	Mt. Juliet, TN

GK00479-05 L1674446-05 Non-Potable Water

Collected by
Collected date/time
Received date/time
11/02/23 13:15 11/06/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2173611	1	11/17/23 23:39	11/22/23 21:28	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2169128	1	11/14/23 12:16	11/22/23 21:28	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2169128	1	11/14/23 12:16	11/16/23 12:04	RRE	Mt. Juliet, TN

GK00479-06 L1674446-06 Non-Potable Water

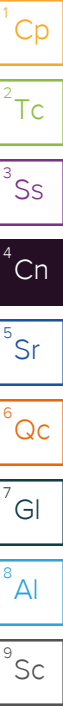
Collected by
Collected date/time
Received date/time
11/02/23 13:38 11/06/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2173611	1	11/17/23 23:39	11/22/23 21:28	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2169128	1	11/14/23 12:16	11/22/23 21:28	RRE	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2169128	1	11/14/23 12:16	11/16/23 12:04	RRE	Mt. Juliet, TN

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.



Haley Torrence
Project Manager



Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	3.48		0.379		0.553		11/22/2023 21:28	WG2173611
(T) Barium	105					30.0-143	11/22/2023 21:28	WG2173611
(T) Yttrium	101					30.0-136	11/22/2023 21:28	WG2173611

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	5.52		0.656	0.628	11/22/2023 21:28	WG2169128

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	2.05		0.536	0.233	0.298	0.200	11/16/2023 12:04	WG2169128
(T) Barium-133	81.9					30.0-143	11/16/2023 12:04	WG2169128

- 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	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	1.41		0.252		0.396		11/22/2023 21:28	WG2173611
(T) Barium	110					30.0-143	11/22/2023 21:28	WG2173611
(T) Yttrium	105					30.0-136	11/22/2023 21:28	WG2173611

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.70		0.368	0.511	11/22/2023 21:28	WG2169128

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.290	J	0.268	0.0805	0.323	0.234	11/16/2023 12:04	WG2169128
(T) Barium-133	61.6					30.0-143	11/16/2023 12:04	WG2169128

- 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	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	1.90		0.378		0.602		11/22/2023 21:28	WG2173611
(T) Barium	100					30.0-143	11/22/2023 21:28	WG2173611
(T) Yttrium	101					30.0-136	11/22/2023 21:28	WG2173611

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	3.93		0.634	0.657	11/22/2023 21:28	WG2169128

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	2.04		0.509	0.236	0.264	0.179	11/16/2023 12:04	WG2169128
(T) Barium-133	84.9					30.0-143	11/16/2023 12:04	WG2169128

- 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	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	1.05		0.309		0.505		11/22/2023 21:28	WG2173611
(T) Barium	107					30.0-143	11/22/2023 21:28	WG2173611
(T) Yttrium	102					30.0-136	11/22/2023 21:28	WG2173611

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.26		0.354	0.537	11/22/2023 21:28	WG2169128

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.216		0.173	0.0662	0.184	0.137	11/16/2023 12:04	WG2169128
(T) Barium-133	77.4					30.0-143	11/16/2023 12:04	WG2169128

- 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	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	1.04		0.329		0.542		11/22/2023 21:28	WG2173611
(T) Barium	117					30.0-143	11/22/2023 21:28	WG2173611
(T) Yttrium	99.5					30.0-136	11/22/2023 21:28	WG2173611

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.04		0.338	0.593	11/22/2023 21:28	WG2169128

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	-0.0535	<u>U</u>	0.0793	0.0171	0.241	0.166	11/16/2023 12:04	WG2169128
(T) Barium-133	84.2					30.0-143	11/16/2023 12:04	WG2169128

- 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	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	2.24		0.419		0.667		11/22/2023 21:28	WG2173611
(T) Barium	115					30.0-143	11/22/2023 21:28	WG2173611
(T) Yttrium	98.8					30.0-136	11/22/2023 21:28	WG2173611

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	4.60		0.752	0.749	11/22/2023 21:28	WG2169128

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	2.36		0.625	0.253	0.341	0.231	11/16/2023 12:04	WG2169128
(T) Barium-133	76.6					30.0-143	11/16/2023 12:04	WG2169128

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

Method Blank (MB)

(MB) R4005431-1 11/22/23 21:28

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.205	↓	0.157	0.267	
(T) Barium	113		113		
(T) Yttrium	99.8		99.8		

L1674446-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1674446-04 11/22/23 21:28 • (DUP) R4005431-5 11/22/23 21:28

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	1.05	0.309	0.505		1.55	0.414	0.676		38.8	0.976		20	3
(T) Barium	107				104	104							
(T) Yttrium	102				105	105							

Laboratory Control Sample (LCS)

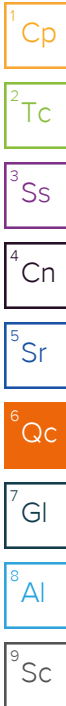
(LCS) R4005431-2 11/22/23 21:28

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.10	102	80.0-120	
(T) Barium			122		
(T) Yttrium			98.7		

L1674446-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1674446-05 11/22/23 21:28 • (MS) R4005431-3 11/22/23 21:28 • (MSD) R4005431-4 11/22/23 21:28

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	16.7	1.04	16.7	15.7	93.9	87.5	1	70.0-130			6.55		20
(T) Barium		117			121	119							
(T) Yttrium		99.5			101	100							



Method Blank (MB)

(MB) R4007716-1 11/16/23 12:04

Analyte	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
	pCi/l		+ / -	pCi/l	pCi/l
Radium-226	0.000	<u>U</u>	0.0407	0.0795	0.0525
(T) Barium-133	81.6		81.6		

L1674446-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1674446-04 11/16/23 12:04 • (DUP) R4007716-5 11/16/23 12:04

Analyte	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
Radium-226	0.216	0.173	0.184	0.137	0.517	0.351	0.414	0.259	82.1	0.768		20	3
(T) Barium-133	77.4				70.2	70.2							

Laboratory Control Sample (LCS)

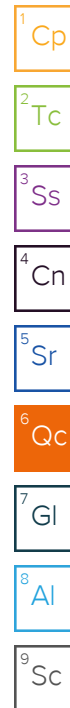
(LCS) R4007716-2 11/16/23 12:04

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-226	5.00	5.04	101	80.0-120	
(T) Barium-133			75.1		

L1664280-36 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1664280-36 11/16/23 12:04 • (MS) R4007716-3 11/16/23 12:04 • (MSD) R4007716-4 11/16/23 12:04

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	0.603	20.6	20.3	99.8	98.7	1	75.0-125			1.12		20
(T) Barium-133		68.9			60.8	51.7							



Guide to Reading and Understanding Your Laboratory Report

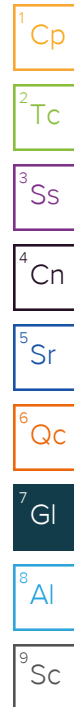
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

Abbreviations and Definitions

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

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



ACCREDITATIONS & LOCATIONS

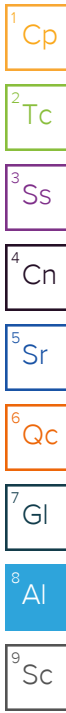
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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



SUBCONTRACT ORDER
Transfer Chain of Custody
Pace Analytical Services, LLC
GK00479

C023

SENDING LABORATORY

PDC Laboratories, Inc.
 2231 W Altorfer Dr
 Peoria, IL 61615
 (800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
 12065 Lebanon Rd
 Mt Juliet, TN 37122
 (615) 758-5858

L1674446

Sample: GK00479-01
Name: AW-15

Sampled: 11/02/23 13:19
Matrix: Ground Water
Preservative: HNO3, pH <2

-01

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/15/23 16:00	04/30/24 13:19	need Ra-226 , Ra-228, total combined and QC forms

Sample: GK00479-02
Name: AW-15S

Sampled: 11/02/23 14:31
Matrix: Ground Water
Preservative: HNO3, pH <2

-02

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/15/23 16:00	04/30/24 14:31	need Ra-226 , Ra-228, total combined and QC forms

Sample: GK00479-03
Name: AW-16

Sampled: 11/02/23 13:38
Matrix: Ground Water
Preservative: HNO3, pH <2

-03

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/15/23 16:00	04/30/24 13:38	need Ra-226 , Ra-228, total combined and QC forms

Sample: GK00479-04
Name: AW-21

Sampled: 11/02/23 13:10
Matrix: Ground Water
Preservative: HNO3, pH <2

-04

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/15/23 16:00	04/30/24 13:10	need Ra-226 , Ra-228, total combined and QC forms

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC
GK00479

SENDING LABORATORY

PDC Laboratories, Inc.
 2231 W Altorfer Dr
 Peoria, IL 61615
 (800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
 12065 Lebanon Rd
 Mt Juliet, TN 37122
 (615) 758-5858

Sample: GK00479-05
Name: FIELD BLANK

Sampled: 11/02/23 13:15
Matrix: DI Water
Preservative: HNO3, pH <2

-05

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/15/23 16:00	04/30/24 13:15	need Ra-226 , Ra-228, total combined and QC forms

Sample: GK00479-06
Name: AW-16 FD

Sampled: 11/02/23 13:38
Matrix: Ground Water
Preservative: HNO3, pH <2

-06

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/15/23 16:00	04/30/24 13:38	need Ra-226 , Ra-228, total combined and QC forms

TDAS19-610 = 19.6

Sample Receipt Checklist

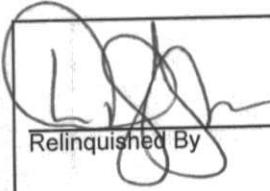
COC Seal Present/Intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	If Applicable	
COC Signed/Accurate:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	VOA Zero Headspace:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Bottles arrive intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Pres. Correct/Check:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Correct bottles used:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N		
Sufficient volume sent:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N		
RA Screen <0.5 mR/hr:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N		

700378080767

Please email results to Diane Billings at diane.billings@pacelabs.com

Date Shipped: 11/3/23 Total # of Containers: 6 Sample Origin (State): IL PO #: _____

Turn-Around Time Requested NORMAL RUSH Date Results Needed: _____

	<u>11/3/23 1105</u>	<u>Timber McCreary</u>	<u>11-6-23 0900</u>	
Relinquished By	Date/Time	Received By	Date/Time	Sample Temperature Upon Receipt _____ °C
				Sample(s) Received on Ice Y or N
				Proper Bottles Received in Good Condition Y or N
				Bottles Filled with Adequate Volume Y or N
				Samples Received Within Hold Time Y or N
				Date/Time Taken From Sample Bottle Y or N
Relinquished By	Date/Time	Received By	Date/Time	

ANALYTICAL REPORT

December 14, 2023

Revised Report

Pace IR - Peoria, IL

Sample Delivery Group: L1676548

Samples Received: 11/09/2023

Project Number: GK00657

Description:

Report To: Diane Billings
2231 W. Altorfer Drive
Peoria, IL 61615

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Entire Report Reviewed By:

Haley Torrence
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

45

TABLE OF CONTENTS

Cp: Cover Page	1	
Tc: Table of Contents	2	
Ss: Sample Summary	3	
Cn: Case Narrative	4	
Sr: Sample Results	5	
GK00657-01 L1676548-01	5	
GK00657-02 L1676548-02	6	
GK00657-03 L1676548-03	7	
GK00657-04 L1676548-04	8	
GK00657-05 L1676548-05	9	
Qc: Quality Control Summary	10	
Radiochemistry by Method 904/9320	10	
Radiochemistry by Method SM7500Ra B M	11	
Gl: Glossary of Terms	12	
Al: Accreditations & Locations	13	
Sc: Sample Chain of Custody	14	

SAMPLE SUMMARY

GK00657-01 L1676548-01 Non-Potable Water

Collected by
 Collected date/time
 Received date/time

11/03/23 13:20
 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2178189	1	11/27/23 18:36	12/01/23 21:21	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

GK00657-02 L1676548-02 Non-Potable Water

Collected by
 Collected date/time
 Received date/time

11/03/23 14:10
 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2178189	1	11/27/23 18:36	12/01/23 21:21	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN

GK00657-03 L1676548-03 Non-Potable Water

Collected by
 Collected date/time
 Received date/time

11/03/23 13:14
 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2178189	1	11/27/23 18:36	12/01/23 21:21	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN

GK00657-04 L1676548-04 Non-Potable Water

Collected by
 Collected date/time
 Received date/time

11/03/23 11:30
 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2178189	1	11/27/23 18:36	12/01/23 21:21	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN

GK00657-05 L1676548-05 Non-Potable Water

Collected by
 Collected date/time
 Received date/time

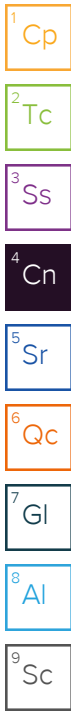
11/03/23 11:43
 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2178189	1	11/27/23 18:36	12/01/23 21:21	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN

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.



Haley Torrence
Project Manager



Report Revision History

Level II Report - Version 1: 12/13/23 15:13

Project Narrative

EDW-845-301

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.799		0.227		0.378		12/01/2023 21:21	WG2178189
(T) Barium	104					30.0-143	12/01/2023 21:21	WG2178189
(T) Yttrium	107					30.0-136	12/01/2023 21:21	WG2178189

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.02		0.347	0.523	12/12/2023 14:33	WG2172482

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.222	J	0.262	0.102	0.362	0.243	12/12/2023 14:33	WG2172482
(T) Barium-133	85.1					30.0-143	12/12/2023 14:33	WG2172482

- 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	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.681		0.258		0.439		12/01/2023 21:21	WG2178189
(T) Barium	128					30.0-143	12/01/2023 21:21	WG2178189
(T) Yttrium	113					30.0-136	12/01/2023 21:21	WG2178189

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.94		0.542	0.533	12/12/2023 14:33	WG2172482

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	1.25		0.477	0.211	0.303	0.217	12/12/2023 14:33	WG2172482
(T) Barium-133	86.0					30.0-143	12/12/2023 14:33	WG2172482

- 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	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	1.52		0.355		0.585		12/01/2023 21:21	WG2178189
(T) Barium	121					30.0-143	12/01/2023 21:21	WG2178189
(T) Yttrium	109					30.0-136	12/01/2023 21:21	WG2178189

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.87		0.457	0.679	12/12/2023 14:33	WG2172482

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.351		0.288	0.117	0.345	0.230	12/12/2023 14:33	WG2172482
(T) Barium-133	85.8					30.0-143	12/12/2023 14:33	WG2172482

- 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	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	1.27		0.479		0.812		12/01/2023 21:21	WG2178189
(T) Barium	116					30.0-143	12/01/2023 21:21	WG2178189
(T) Yttrium	116					30.0-136	12/01/2023 21:21	WG2178189

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.85		0.562	0.852	12/12/2023 14:33	WG2172482

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.583		0.293	0.136	0.259	0.176	12/12/2023 14:33	WG2172482
(T) Barium-133	93.4					30.0-143	12/12/2023 14:33	WG2172482

- 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	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.137	<u>U</u>	0.203		0.360		12/01/2023 21:21	WG2178189
(T) Barium	109					30.0-143	12/01/2023 21:21	WG2178189
(T) Yttrium	107					30.0-136	12/01/2023 21:21	WG2178189

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.519		0.329	0.439	12/12/2023 14:33	WG2172482

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.382		0.259	0.109	0.252	0.183	12/12/2023 14:33	WG2172482
(T) Barium-133	84.7					30.0-143	12/12/2023 14:33	WG2172482

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4010971-1 12/01/23 21:21

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.292	↓	0.189	0.328	
(T) Barium	79.5		79.5		
(T) Yttrium	100		100		

L1671061-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1671061-01 12/01/23 21:21 • (DUP) R4010971-5 12/01/23 21:21

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.806	0.364	0.630		0.846	0.500	0.862		4.90	0.0655	↓	20	3
(T) Barium	81.5				81.6	81.6							
(T) Yttrium	95.8				99.3	99.3							

Laboratory Control Sample (LCS)

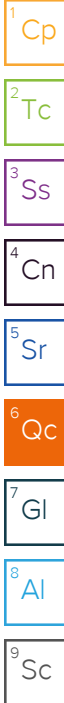
(LCS) R4010971-2 12/01/23 21:21

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.05	81.0	80.0-120	
(T) Barium			78.1		
(T) Yttrium			79.4		

L1671399-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1671399-01 12/01/23 21:21 • (MS) R4010971-3 12/01/23 21:21 • (MSD) R4010971-4 12/01/23 21:21

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	10.0	4.31	11.6	12.1	72.5	78.1	1	70.0-130			4.73		20
(T) Barium		82.5			83.5	82.8							
(T) Yttrium		109			102	101							



Method Blank (MB)

(MB) R4011543-2 12/12/23 14:33

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.0186	<u>U</u>	0.0477	0.0843	0.0596
(T) Barium-133	75.3		75.3		

L1676546-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1676546-10 12/12/23 14:33 • (DUP) R4011543-5 12/12/23 14:33

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.541	0.309	0.272	0.195	0.0424	0.152	0.267	0.179	171	1.45	<u>U</u>	20	3
(T) Barium-133	97.6				99.4	99.4							

Laboratory Control Sample (LCS)

(LCS) R4011543-1 12/12/23 10:46

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.69	114	80.0-120	
(T) Barium-133			66.6		

L1676548-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1676548-05 12/12/23 14:33 • (MS) R4011543-3 12/12/23 14:33 • (MSD) R4011543-4 12/12/23 14:33

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	0.382	21.4	23.1	105	113	1	75.0-125			7.70		20
(T) Barium-133		84.7			83.3	72.2							



Guide to Reading and Understanding Your Laboratory Report

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

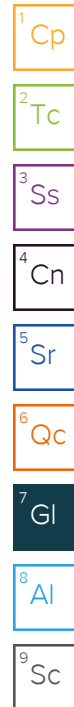
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location.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

Abbreviations and Definitions

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

Qualifier Description

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



ACCREDITATIONS & LOCATIONS

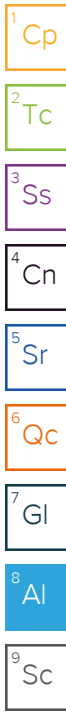
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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



SUBCONTRACT ORDER
 Transfer Chain of Custody
 Pace Analytical Services, LLC
 GK00657

A060

SENDING LABORATORY

PDC Laboratories, Inc.
 2231 W Altorfer Dr
 Peoria, IL 61615
 (800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
 12065 Lebanon Rd
 Mt Juliet, TN 37122
 (615) 758-5858

L1676548

Sample: GK00657-01
Name: AP07S

Sampled: 11/03/23 13:20
Matrix: Ground Water
Preservative: HNO3, pH <2

-01

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/16/23 16:00	05/01/24 13:20	need Ra-226 , Ra-228, total combined and QC forms

Sample: GK00657-02
Name: AW-11

Sampled: 11/03/23 14:10
Matrix: Ground Water
Preservative: HNO3, pH <2

-02

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/16/23 16:00	05/01/24 14:10	need Ra-226 , Ra-228, total combined and QC forms

Sample: GK00657-03
Name: AW-14

Sampled: 11/03/23 13:14
Matrix: Ground Water
Preservative: HNO3, pH <2

-03

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/16/23 16:00	05/01/24 13:14	need Ra-226 , Ra-228, total combined and QC forms

12/13/23 3066

Sample: GK00657-04
Name: AW-23

Sampled: 11/03/23 11:00
Matrix: Ground Water
Preservative: HNO3, pH <2

11:30
-04

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/16/23 16:00	05/01/24 11:00	need Ra-226 , Ra-228, total combined and QC forms

PH-10BDH4321 TRC-2362362
 CR6-20221V

SUBCONTRACT ORDER
 Transfer Chain of Custody
 Pace Analytical Services, LLC
 GK00657

SENDING LABORATORY

PDC Laboratories, Inc.
 2231 W Altorfer Dr
 Peoria, IL 61615
 (800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
 12065 Lebanon Rd
 Mt Juliet, TN 37122
 (615) 758-5858

41670548
12/13/23 Lab
1143
-05

Sample: GK00657-05
 Name: EMW-05

Sampled: 11/03/23 11:03
 Matrix: Ground Water
 Preservative: HNO3, pH <2

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/16/23 16:00	05/01/24 11:03	need Ra-226 , Ra-228, total combined and QC forms

7003 7808 3354
18.1 ± 0 = 18.1 MS
A8

Sample Receipt Checklist

COC Seal Present/Intact:	<input checked="" type="checkbox"/>	
COC Signed/Accurate:	<input checked="" type="checkbox"/>	If Applicable
Bottles arrive intact:	<input checked="" type="checkbox"/>	VOL Zero Headspace: <input checked="" type="checkbox"/>
Correct bottles used:	<input checked="" type="checkbox"/>	Pres. Correct/Check: <input checked="" type="checkbox"/>
Sufficient volume sent:	<input checked="" type="checkbox"/>	
RA Screen <0.5 mR/hr:	<input checked="" type="checkbox"/>	

Please email results to Diane Billings at diane.billings@pacelabs.com

Date Shipped: 11/8/23 Total # of Containers: 5 Sample Origin (State): IL PO #: _____
 Turn-Around Time Requested NORMAL RUSH Date Results Needed: _____

Relinquished By: <i>[Signature]</i>	Date/Time: <u>11/8/23 11:20</u>	Received By: <i>[Signature]</i>	Date/Time: <u>11/9/23 9:00</u>	Sample Temperature Upon Receipt: _____ °C
Relinquished By: _____	Date/Time: _____	Received By: _____	Date/Time: _____	Sample(s) Received on Ice: <input type="checkbox"/> Y or N
				Proper Bottles Received in Good Condition: <input type="checkbox"/> Y or N
				Bottles Filled with Adequate Volume: <input type="checkbox"/> Y or N
				Samples Received Within Hold Time: <input type="checkbox"/> Y or N
				Date/Time Taken From Sample Bottle: <input type="checkbox"/> Y or N

ANALYTICAL REPORT

December 13, 2023

Pace IR - Peoria, IL

Sample Delivery Group: L1676546

Samples Received: 11/09/2023

Project Number: GK00902

Description:

Report To: Diane Billings
2231 W. Altorfer Drive
Peoria, IL 61615

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Entire Report Reviewed By:

Haley Torrence
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.

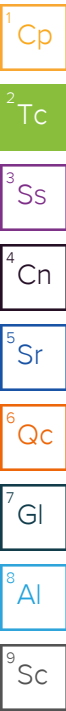
Pace Analytical National

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

60

TABLE OF CONTENTS

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	5
Sr: Sample Results	6
GK00902-01 L1676546-01	6
GK00902-02 L1676546-02	7
GK00902-03 L1676546-03	8
GK00902-04 L1676546-04	9
GK00902-05 L1676546-05	10
GK00902-06 L1676546-06	11
GK00902-07 L1676546-07	12
GK00902-08 L1676546-08	13
GK00902-09 L1676546-09	14
GK00902-10 L1676546-10	15
Qc: Quality Control Summary	16
Radiochemistry by Method 904/9320	16
Radiochemistry by Method SM7500Ra B M	19
Gl: Glossary of Terms	20
Al: Accreditations & Locations	21
Sc: Sample Chain of Custody	22

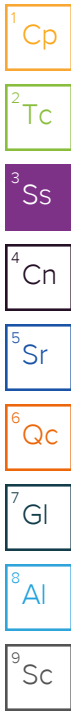


SAMPLE SUMMARY

GK00902-01 L1676546-01 Non-Potable Water

Collected by
 Collected date/time
 Received date/time
 11/06/23 11:00 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2176321	1	11/22/23 14:02	11/28/23 20:05	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN



GK00902-02 L1676546-02 Non-Potable Water

Collected by
 Collected date/time
 Received date/time
 11/06/23 12:10 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2176321	1	11/22/23 14:02	11/28/23 20:05	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN

GK00902-03 L1676546-03 Non-Potable Water

Collected by
 Collected date/time
 Received date/time
 11/06/23 14:40 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2176321	1	11/22/23 14:02	11/28/23 20:05	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN

GK00902-04 L1676546-04 Non-Potable Water

Collected by
 Collected date/time
 Received date/time
 11/06/23 15:47 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2178189	1	11/27/23 18:36	12/01/23 21:21	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN

GK00902-05 L1676546-05 Non-Potable Water

Collected by
 Collected date/time
 Received date/time
 11/06/23 12:50 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2178189	1	11/27/23 18:36	12/01/23 21:21	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN

GK00902-06 L1676546-06 Non-Potable Water

Collected by
 Collected date/time
 Received date/time
 11/06/23 16:13 11/09/23 09:00

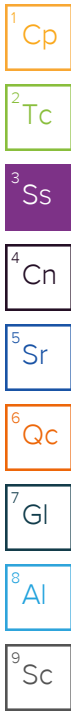
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2178796	1	11/28/23 17:54	12/04/23 19:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN

SAMPLE SUMMARY

GK00902-07 L1676546-07 Non-Potable Water

Collected by
 Collected date/time 11/06/23 11:15
 Received date/time 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2178189	1	11/27/23 18:36	12/01/23 21:21	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN



GK00902-08 L1676546-08 Non-Potable Water

Collected by
 Collected date/time 11/06/23 14:40
 Received date/time 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2178189	1	11/27/23 18:36	12/01/23 21:21	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN

GK00902-09 L1676546-09 Non-Potable Water

Collected by
 Collected date/time 11/06/23 14:40
 Received date/time 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2178796	1	11/28/23 17:54	12/04/23 19:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN

GK00902-10 L1676546-10 Non-Potable Water

Collected by
 Collected date/time 11/06/23 16:45
 Received date/time 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2178796	1	11/28/23 17:54	12/04/23 19:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2172482	1	11/17/23 18:10	12/12/23 14:33	RGT	Mt. Juliet, TN

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.



Haley Torrence
Project Manager

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

GK0090201

ATTACHMENT B.

SAMPLE RESULTS - 01

845 QUARTERLY REPORT - QUARTER 4, 2023

L1676546

EDWARDS POWER PLANT, ASH POND

EDW-845-301

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	1.51		0.431		0.761		11/28/2023 20:05	WG2176321
(T) Barium	113					30.0-143	11/28/2023 20:05	WG2176321
(T) Yttrium	119					30.0-136	11/28/2023 20:05	WG2176321

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	3.94		0.838	0.861	12/12/2023 14:33	WG2172482

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	2.43		0.719	0.239	0.403	0.279	12/12/2023 14:33	WG2172482
(T) Barium-133	62.9					30.0-143	12/12/2023 14:33	WG2172482

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

GK0090202

ATTACHMENT B.

SAMPLE RESULTS - 02

845 QUARTERLY REPORT - QUARTER 4, 2023
 Collected date: 11/06/23 12:10

L1676546

EDWARDS POWER PLANT, ASH POND
 EDW-845-301

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	2.51		0.432		0.738		11/28/2023 20:05	WG2176321
(T) Barium	115					30.0-143	11/28/2023 20:05	WG2176321
(T) Yttrium	120					30.0-136	11/28/2023 20:05	WG2176321

- 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	3.70		0.619	0.780	12/12/2023 14:33	WG2172482

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	1.19		0.443	0.199	0.253	0.188	12/12/2023 14:33	WG2172482
(T) Barium-133	87.0					30.0-143	12/12/2023 14:33	WG2172482

GK0090203

ATTACHMENT B.

SAMPLE RESULTS - 03

845 QUARTERLY REPORT - QUARTER 4, 2023
 Collected date: 11/26/23 14:40

L1676546

EDWARDS POWER PLANT, ASH POND
 EDW-845-301

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	4.46		0.417		0.652		11/28/2023 20:05	WG2176321
(T) Barium	125					30.0-143	11/28/2023 20:05	WG2176321
(T) Yttrium	119					30.0-136	11/28/2023 20:05	WG2176321

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	4.72		0.467	0.694	12/12/2023 14:33	WG2172482

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.251		0.211	0.0899	0.237	0.173	12/12/2023 14:33	WG2172482
(T) Barium-133	86.9					30.0-143	12/12/2023 14:33	WG2172482

- 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	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.195	J	0.239		0.420		12/01/2023 21:21	WG2178189
(T) Barium	102					30.0-143	12/01/2023 21:21	WG2178189
(T) Yttrium	101					30.0-136	12/01/2023 21:21	WG2178189

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.465	J	0.323	0.480	12/12/2023 14:33	WG2172482

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.270		0.218	0.103	0.233	0.173	12/12/2023 14:33	WG2172482
(T) Barium-133	95.1					30.0-143	12/12/2023 14:33	WG2172482

- 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	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	-0.382	<u>U</u>	0.219		0.405		12/01/2023 21:21	WG2178189
(T) Barium	99.5					30.0-143	12/01/2023 21:21	WG2178189
(T) Yttrium	104					30.0-136	12/01/2023 21:21	WG2178189

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.785		0.384	0.438	12/12/2023 14:33	WG2172482

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.785		0.315	0.147	0.168	0.132	12/12/2023 14:33	WG2172482
(T) Barium-133	90.3					30.0-143	12/12/2023 14:33	WG2172482

- 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	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	12.0		0.697		0.898		12/04/2023 19:53	WG2178796
(T) Barium	135					30.0-143	12/04/2023 19:53	WG2178796
(T) Yttrium	128					30.0-136	12/04/2023 19:53	WG2178796

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	29.1		2.68	1.29	12/12/2023 14:33	WG2172482

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	17.1		2.59	1.23	0.933	0.616	12/12/2023 14:33	WG2172482
(T) Barium-133	82.9					30.0-143	12/12/2023 14:33	WG2172482

- 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	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.328	J	0.216		0.376		12/01/2023 21:21	WG2178189
(T) Barium	115					30.0-143	12/01/2023 21:21	WG2178189
(T) Yttrium	102					30.0-136	12/01/2023 21:21	WG2178189

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.35		0.565	0.565	12/12/2023 14:33	WG2172482

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	1.02		0.522	0.148	0.422	0.302	12/12/2023 14:33	WG2172482
(T) Barium-133	56.4					30.0-143	12/12/2023 14:33	WG2172482

- 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	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	2.39		0.636		1.06		12/01/2023 21:21	WG2178189
(T) Barium	118					30.0-143	12/01/2023 21:21	WG2178189
(T) Yttrium	103					30.0-136	12/01/2023 21:21	WG2178189

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	3.58		0.823	1.15	12/12/2023 14:33	WG2172482

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	1.20		0.522	0.209	0.442	0.293	12/12/2023 14:33	WG2172482
(T) Barium-133	79.8					30.0-143	12/12/2023 14:33	WG2172482

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

EDW-845-301

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	-0.315	<u>U</u>	0.264		0.489		12/04/2023 19:53	WG2178796
(T) Barium	103					30.0-143	12/04/2023 19:53	WG2178796
(T) Yttrium	117					30.0-136	12/04/2023 19:53	WG2178796

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.0339	<u>U</u>	0.325	0.604	12/12/2023 14:33	WG2172482

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.0339	<u>U</u>	0.189	0.0707	0.354	0.241	12/12/2023 14:33	WG2172482
(T) Barium-133	89.9					30.0-143	12/12/2023 14:33	WG2172482

- 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	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.305	J	0.221		0.395		12/04/2023 19:53	WG2178796
(T) Barium	111					30.0-143	12/04/2023 19:53	WG2178796
(T) Yttrium	138	C1				30.0-136	12/04/2023 19:53	WG2178796

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.846		0.380	0.480	12/12/2023 14:33	WG2172482

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.541		0.309	0.152	0.272	0.195	12/12/2023 14:33	WG2172482
(T) Barium-133	97.6					30.0-143	12/12/2023 14:33	WG2172482

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4009589-1 12/01/23 17:38

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.329		0.147	0.257	
(T) Barium	104		104		
(T) Yttrium	96.3		96.3		

L1670483-33 Original Sample (OS) • Duplicate (DUP)

(OS) L1670483-33 12/01/23 17:38 • (DUP) R4009589-5 12/01/23 17:38

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.501	0.360	0.638		0.902	0.373	0.650		57.2	0.774		20	3
(T) Barium	103				104	104							
(T) Yttrium	102				106	106							

Laboratory Control Sample (LCS)

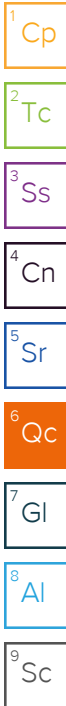
(LCS) R4009589-2 12/01/23 17:38

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.29	85.8	80.0-120	
(T) Barium			107		
(T) Yttrium			101		

L1672385-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1672385-10 11/28/23 20:05 • (MS) R4009589-3 12/01/23 17:38 • (MSD) R4009589-4 12/01/23 17:38

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	2.91	14.0	15.1	66.5	73.1	1	70.0-130	J6		7.62		20
(T) Barium		123			109	112							
(T) Yttrium		118			99.4	107							



Method Blank (MB)

(MB) R4010971-1 12/01/23 21:21

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.292	↓	0.189	0.328	
(T) Barium	79.5		79.5		
(T) Yttrium	100		100		

L1671061-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1671061-01 12/01/23 21:21 • (DUP) R4010971-5 12/01/23 21:21

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.806	0.364	0.630		0.846	0.500	0.862		4.90	0.0655	↓	20	3
(T) Barium	81.5				81.6	81.6							
(T) Yttrium	95.8				99.3	99.3							

Laboratory Control Sample (LCS)

(LCS) R4010971-2 12/01/23 21:21

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.05	81.0	80.0-120	
(T) Barium			78.1		
(T) Yttrium			79.4		

L1671399-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1671399-01 12/01/23 21:21 • (MS) R4010971-3 12/01/23 21:21 • (MSD) R4010971-4 12/01/23 21:21

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	10.0	4.31	11.6	12.1	72.5	78.1	1	70.0-130			4.73		20
(T) Barium		82.5			83.5	82.8							
(T) Yttrium		109			102	101							

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4010925-1 12/04/23 19:53

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.445		0.147	0.254	
(T) Barium	106		106		
(T) Yttrium	135		135		

L1676546-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1676546-10 12/04/23 19:53 • (DUP) R4010925-5 12/04/23 19:53

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.305	0.221	0.395		0.261	0.381	0.685		15.4	0.0990	<u>U</u>	20	3
(T) Barium	111				111	111							
(T) Yttrium	138				130	130							

Laboratory Control Sample (LCS)

(LCS) R4010925-2 12/04/23 19:53

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.05	81.0	80.0-120	
(T) Barium			109		
(T) Yttrium			118		

L1671399-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1671399-09 12/04/23 19:53 • (MS) R4010925-3 12/04/23 19:53 • (MSD) R4010925-4 12/04/23 19:53

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	1.37	8.38	8.76	70.2	74.0	1	70.0-130			4.44		20
(T) Barium		109			110	113							
(T) Yttrium		152			107	122							

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gf

8 Al

9 Sc

EDW-845-301

Method Blank (MB)

(MB) R4011543-2 12/12/23 14:33

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.0186	<u>U</u>	0.0477	0.0843	0.0596
(T) Barium-133	75.3		75.3		

L1676546-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1676546-10 12/12/23 14:33 • (DUP) R4011543-5 12/12/23 14:33

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.541	0.309	0.272	0.195	0.0424	0.152	0.267	0.179	171	1.45	<u>U</u>	20	3
(T) Barium-133	97.6				99.4	99.4							

Laboratory Control Sample (LCS)

(LCS) R4011543-1 12/12/23 10:46

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.69	114	80.0-120	
(T) Barium-133			66.6		

L1676548-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1676548-05 12/12/23 14:33 • (MS) R4011543-3 12/12/23 14:33 • (MSD) R4011543-4 12/12/23 14:33

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	0.382	21.4	23.1	105	113	1	75.0-125			7.70		20
(T) Barium-133		84.7			83.3	72.2							



Guide to Reading and Understanding Your Laboratory Report

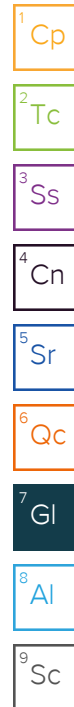
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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
C1	Tracer recovery limits have been exceeded; values are outside upper control limits.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
U	Below Detectable Limits: Indicates that the analyte was not detected.



ACCREDITATIONS & LOCATIONS

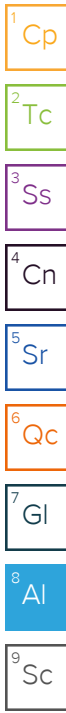
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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



SUBCONTRACT ORDER
Transfer Chain of Custody

C176

Pace Analytical Services, LLC
GK00902

SENDING LABORATORY

PDC Laboratories, Inc.
 2231 W Altorfer Dr
 Peoria, IL 61615
 (800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
 12065 Lebanon Rd
 Mt Juliet, TN 37122
 (615) 758-5858

LL676546

Sample: GK00902-01
Name: AP05S

Sampled: 11/06/23 11:00
Matrix: Ground Water
Preservative: HNO3, pH <2

-01

↙

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 11:00	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 11:00	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: GK00902-02
Name: APW-01

Sampled: 11/06/23 12:10
Matrix: Ground Water
Preservative: HNO3, pH <2

-02

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 12:10	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 12:10	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: GK00902-03
Name: AW-01

Sampled: 11/06/23 14:40
Matrix: Ground Water
Preservative: HNO3, pH <2

-03

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 14:40	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 14:40	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample Receipt Checklist

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

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC
GK00902

4676546

SENDING LABORATORY

PDC Laboratories, Inc.
 2231 W Altorfer Dr
 Peoria, IL 61615
 (800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
 12065 Lebanon Rd
 Mt Juliet, TN 37122
 (615) 758-5858

Sample: GK00902-04
Name: AW-05

Sampled: 11/06/23 15:47
Matrix: Ground Water
Preservative: HNO₃, pH <2

-04

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 15:47	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 15:47	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: GK00902-05
Name: AW-06

Sampled: 11/06/23 12:50
Matrix: Ground Water
Preservative: HNO₃, pH <2

-05

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 12:50	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 12:50	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: GK00902-06
Name: AW-08

Sampled: 11/06/23 16:13
Matrix: Ground Water
Preservative: HNO₃, pH <2

-06

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 16:13	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 16:13	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC
GK00902

U67 6546

SENDING LABORATORY

PDC Laboratories, Inc.
 2231 W Altorfer Dr
 Peoria, IL 61615
 (800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
 12065 Lebanon Rd
 Mt Juliet, TN 37122
 (615) 758-5858

Sample: GK00902-07
Name: AW-09

Sampled: 11/06/23 11:15
Matrix: Ground Water
Preservative: HNO₃, pH <2

-07

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 11:15	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 11:15	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: GK00902-08
Name: AW-10

Sampled: 11/06/23 14:40
Matrix: Ground Water
Preservative: HNO₃, pH <2

-08

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 14:40	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 14:40	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: GK00902-09
Name: AW-01 DUP

Sampled: 11/06/23 14:40
Matrix: Ground Water
Preservative: HNO₃, pH <2

-09

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 14:40	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 14:40	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC
GK00902

U676546

SENDING LABORATORY

PDC Laboratories, Inc.
 2231 W Altorfer Dr
 Peoria, IL 61615
 (800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
 12065 Lebanon Rd
 Mt Juliet, TN 37122
 (615) 758-5858

Sample: GK00902-10
Name: EQUIPMENT BLANK 1

Sampled: 11/06/23 16:45
Matrix: DI Water
Preservative: HNO3, pH <2

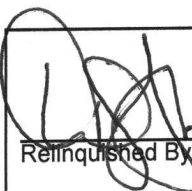

-10

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 16:45	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	11/17/23 16:00	05/04/24 16:45	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Please email results to Diane Billings at diane.billings@pacelabs.com

Date Shipped: 11/8/23 Total # of Containers: 10 Sample Origin (State): IL PO #: _____

Turn-Around Time Requested NORMAL RUSH Date Results Needed: _____

 Relinquished By	<u>11/8/23 1105</u> Date/Time	 Received By	<u>11-9-23 0900</u> Date/Time	Sample Temperature Upon Receipt <u>17.5</u> °C
				Sample(s) Received on Ice Y or N
				Proper Bottles Received in Good Condition Y or N
				Bottles Filled with Adequate Volume Y or N
				Samples Received Within Hold Time Y or N
				Date/Time Taken From Sample Bottle Y or N

6k00259
Jm

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 1 of 2	
Company: Vistra Corp-Edwards		Report To: Brian Voelker		Attention: Mark Davis			
Address: 7800 Cilco Lane		Copy To: Sam Davies-samantha.davies@vistracorp.com		Company Name: Vistra Corp-Edwards		REGULATORY AGENCY	
Peoria, IL 61607		Mark Davis-Mark.Davis1@vistracorp.com		Address: see Section A			
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:		NPDES GROUND WATER DRINKING WATER	
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:		UST RCRA OTHER	
Requested Due Date/TAT: 10 day		Project Number: 2285		Profile #:		Site Location	
						STATE: IL	

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	COLLECTED	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Requested Analysis Filtered (Y/N)				Residual Chlorine (Y/N)	Project No./ Lab I.D.	
						DATE	TIME	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	Analysis Test	EDW-257-301	EDW-845-301	EDW-SUP-000			EDW-PGMP-301
1	AP05S																					
2	AP07S																					
3	APW-01																					
4	AW-01																					
5	AW-05																					
6	AW-06																					
7	AW-08																					
8	AW-09																					
9	AW-10																					
10	AW-11																					
11	AW-14																					
12	AW-15																					
13	AW-15S																					
14	AW-16																					
15	AW-17			WT G	11/1/23	1133	4	X	X													
16	AW-18			WT G	11/1/23	1255	4	X	X													

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	SAMPLE CONDITIONS			
EDW-23Q4-Rev 0				11/1/23	1609			11/1/23	1609	5.8	Y	N	Y
SAMPLER NAME AND SIGNATURE										Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Aaron Remickson					SIGNATURE of SAMPLER:								

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: Vistra Corp-Edwards		Report To: Brian Voelker		Attention: Mark Davis	
Address: 7800 Cilco Lane		Copy To: Sam Davies-samantha.davies@vistracorp.com		Company Name: Vistra Corp-Edwards	
Peoria, IL 61607		Mark Davis-Mark.Davis1@vistracorp.com		Address: see Section A	
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:	
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:	
Requested Due Date/TAT: 10 day		Project Number: 2285		Profile #:	
				REGULATORY AGENCY	
				NPDES GROUND WATER DRINKING WATER	
				UST RCRA OTHER	
				Site Location	
				STATE: IL	

ITEM #	Section D Required Client Information SAMPLE ID (A-Z, 0-9 / . -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↓ Analysis Test ↓ Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Project No./ Lab I.D.	
		MATRIX	CODE			DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol					Other
		DRINKING WATER WATER WASTE WATER PRODUCT SOIL/SOLID OIL WIPE AIR OTHER TISSUE	DW WT WW P SL OL WP AR OT TS																		
1	AW-19			WT6	G	11/1/23	1412		4	X	X										
2	AW-20			WT6	G	11/1/23	1536		4	X	X										
3	AW-21																				
4	AW-23																				
5	EMW-05																				
12	Field Blank																				
13																					
14																					
15																					
16																					
ADDITIONAL COMMENTS				RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION				DATE		TIME		SAMPLE CONDITIONS			
EDW-23Q4-Rev 0				<i>[Signature]</i>		11/1/23		1609		<i>[Signature]</i>				11/1/23		1609		5.8 Y N Y			

SAMPLER NAME AND SIGNATURE				Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:			<i>Aaron Remington</i>				
SIGNATURE of SAMPLER:			DATE Signed (MM/DD/YY): 11/1/2023				

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		REGULATORY AGENCY	
Company: Vistra Corp-Edwards		Report To: Brian Voelker		Attention: Mark Davis		NPDES GROUND WATER DRINKING WATER	
Address: 7800 Cilco Lane		Copy To: Sam Davies-samantha.davies@vistracorp.com		Company Name: Vistra Corp-Edwards		UST RCRA OTHER	
Peoria, IL 61607		Mark Davis-Mark.Davis1@vistracorp.com		Address: see Section A		Site Location	
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:		STATE: IL	
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:		GK00479 <i>gjd</i>	
Requested Due Date/TAT: 10 day		Project Number: 2285		Profile #:			

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL OL WIPE WP AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Requested Analysis Filtered (Y/N)				Residual Chlorine (Y/N)	Project No./ Lab I.D.	
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	Analysis Test ↓	Y	N	Y			N
1	AP05S																						
2	AP07S																						
3	APW-01																						
4	AW-01																						
5	AW-05																						
6	AW-06																						
7	AW-08																						
8	AW-09																						
9	AW-10																						
10	AW-11																						
11	AW-14																						
12	AW-15																						
13	AW-15S																						
14	AW-16																						
15	AW-17																						
16	AW-18																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS				
EDW-23Q4-Rev 0	<i>[Signature]</i>	11/2/23	1600	<i>[Signature]</i>	11/2/23	1600	14.5	Y	N	Y	

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <i>Adrian Pemberton</i>					
SIGNATURE of SAMPLER: <i>[Signature]</i>	DATE Signed (MM/DD/YY): <i>11/02/23</i>				

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: Vistra Corp-Edwards		Report To: Brian Voelker		Attention: Mark Davis	
Address: 7800 Cilco Lane		Copy To: Sam Davies-samantha.davies@vistracorp.com		Company Name: Vistra Corp-Edwards	
Peoria, IL 61607		Mark Davis-Mark.Davis1@vistracorp.com		Address: see Section A	
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:	
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:	
Requested Due Date/TAT: 10 day		Project Number: 2285		Profile #:	
REGULATORY AGENCY					
		NPDES		GROUND WATER	
		UST		RCRA	
				DRINKING WATER	
				OTHER	
Site Location				STATE: IL	
				GK00479 <i>ged</i>	

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test ↓ Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Project No./ Lab I.D.								
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other					Requested Analysis Filtered (Y/N)							
1	AW-19																											
2	AW-20																											
3	AW-21		WTG		11/2/23	1310	4	X	X																			
4	AW-23																											
5	EMW-05																											
12	Field Blank		WTG		11/2/23	1315	4	X	X																			
13	AW-16 FD		WTG		11/2/23	1338	4	X	X																			
14																												
15																												
16																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
EDW-23Q4-Rev 0	<i>[Signature]</i>	11/2/23	1600	<i>[Signature]</i>	11/2/23	1600	14.5	Y	N	Y

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <i>Arnon Revoluton</i>					
SIGNATURE of SAMPLER: <i>[Signature]</i>					
DATE Signed (MM/DD/YY): 11/02/23					

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		REGULATORY AGENCY					
Company: <u>Vistra Corp-Edwards</u>		Report To: <u>Brian Voelker</u>		Attention: <u>Mark Davis</u>					NPDES GROUND WATER DRINKING WATER		
Address: <u>7800 Cilco Lane</u>		Copy To: <u>Sam Davies-samantha.davies@vistracorp.com</u>		Company Name: <u>Vistra Corp-Edwards</u>					UST RCRA OTHER		
<u>Peoria, IL 61607</u>		<u>Mark Davis-Mark.Davis1@vistracorp.com</u>		Address: <u>see Section A</u>					Site Location: <u>IL</u> <u>GK00657</u> <u>ged</u>		
Email To: <u>Brian.Voelker@VistraCorp.com</u>		Purchase Order No.:		Quote Reference:		STATE: <u>IL</u>					
Phone: <u>(217) 753-8911</u> Fax:		Project Name:		Project Manager:		Requested Analysis Filtered (Y/N)					
Requested Due Date/TAT: <u>10 day</u>		Project Number: <u>2285</u>		Profile #:							

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test ↓ Y/N ↓	Residual Chlorine (Y/N)	Project No./ Lab I.D.
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other			
1	AP05S																		
2	AP07S		WT 6		11/3/23	1320	4	X	X										
3	APW-01																		
4	AW-01																		
5	AW-05																		
6	AW-06																		
7	AW-08																		
8	AW-09																		
9	AW-10																		
10	AW-11		WT 6		11/3/23	1410	4	X	X										
11	AW-14		WT 6		11/3/23	1314	4	X	X										
12	AW-15																		
13	AW-15S																		
14	AW-16																		
15	AW-17																		
16	AW-18																		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
EDW-23Q4-Rev 0		11/3/23	1503		11/8/23	1503	10.7	Y	N	Y

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:					
SIGNATURE of SAMPLER:		DATE Signed (MM/DD/YY):	11/03/23		

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		REGULATORY AGENCY	
Company: Vistra Corp-Edwards		Report To: Brian Voelker		Attention: Mark Davis		NPDES GROUND WATER DRINKING WATER	
Address: 7800 Cilco Lane		Copy To: Sam Davies-samantha.davies@vistracorp.com		Company Name: Vistra Corp-Edwards		UST RCRA OTHER	
Peoria, IL 61607		Mark Davis-Mark.Davis1@vistracorp.com		Address: see Section A		Site Location	
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:		STATE: IL	
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:		G1200657 <i>ged</i>	
Requested Due Date/TAT: 10 day		Project Number: 2285		Profile #:			

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	COLLECTED	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test	Requested Analysis Filtered (Y/N)				Residual Chlorine (Y/N)	Project No./ Lab I.D.				
						DATE	TIME	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		EDW-257-301	EDW-845-301	EDW-SUP-000	EDW-PGMP-301						
1	AW-19																									
2	AW-20																									
3	AW-21																									
4	AW-23																									
5	EMW-05																									
12	Field Blank																									
13																										
14																										
15																										
16																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS				
EDW-23Q4-Rev 0	<i>[Signature]</i>	11/13/23	1503	<i>[Signature]</i>	11/13/23	1503	10.7	Y	N	Y	

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <i>Arden Plumbergen</i>					
SIGNATURE of SAMPLER: <i>[Signature]</i>					
DATE Signed (MM/DD/YY): 11/03/23					

GK00902

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section B Required Project Information: Report To: Brian Voelker		Section C Invoice Information: Attention: Mark Davis	
Address: 7800 Cilco Lane Peoria, IL 61607		Company Name: Vistra Corp-Edwards	
Email To: Brian.Voelker@VistraCorp.com		Address: see Section A	
Phone: (217) 753-8911 Fax:		Project Name:	
Requested Due Date/TAT: 10 day		Project Number: 2285	
REGULATORY AGENCY			
NPDES		GROUND WATER	
UST		RCRA	
DRINKING WATER		OTHER	
Site Location		STATE: IL	

ITEM #	Section D Required Client Information SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL OL WIPE WP AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test ↓	Requested Analysis Filtered (Y/N)				Residual Chlorine (Y/N)	Project No./ Lab I.D.		
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	EDW-257-301	EDW-845-301		EDW-SUP-000	EDW-PGMP-301						
1	AW-19																										
2	AW-20																										
3	AW-21																										
4	AW-23																										
5	EMW-05																										
12	Field Blank																										
13	AW-01 Dup		WT 6		11/6/23	1440	4	X	X																		
14	Equipment Blank 1		WT 6		11/6/23	1645	4	X	X																		
15																											
16																											

ADDITIONAL COMMENTS EDW-23Q4-Rev 0		RELINQUISHED BY / AFFILIATION 		DATE 11/6/23	TIME 1709	ACCEPTED BY / AFFILIATION 		DATE 11/6/23	TIME 1710	Temp in °C 5.7	Received on Ice (Y/N) Y	Custody Sealed Cooler (Y/N) Y	Samples Intact (Y/N) Y
SAMPLER NAME AND SIGNATURE													
PRINT Name of SAMPLER: <i>Avron Remberton</i>													
SIGNATURE of SAMPLER:													
DATE Signed (MM/DD/YY): 11/06/23													

GK00902

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		REGULATORY AGENCY					
Company: <u>Vistra Corp-Edwards</u>		Report To: <u>Brian Voelker</u>		Attention: <u>Mark Davis</u>					NPDES GROUND WATER DRINKING WATER		
Address: <u>7800 Cilco Lane</u>		Copy To: <u>Sam Davies-samantha.davies@vistracorp.com</u>		Company Name: <u>Vistra Corp-Edwards</u>					UST RCRA OTHER		
<u>Peoria, IL 61607</u>		<u>Mark Davis-Mark.Davis1@vistracorp.com</u>		Address: <u>see Section A</u>					Site Location		
Email To: <u>Brian.Voelker@VistraCorp.com</u>		Purchase Order No.:		Quote Reference:					STATE: <u>IL</u>		
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:		Project No.:					
Requested Due Date/TAT: <u>10 day</u>		Project Number: <u>2285</u>		Profile #:		Requested Analysis Filtered (Y/N)					

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL OL WIPE WP AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test ↓ Analysis Test ↑	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Project No./ Lab I.D.
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other				
1	AP05S		WT 6	G	11/6/23	1100	4	X	X											
2	AP07S																			
3	APW-01		WT 6	G	11/6/23	1210	4	X	X											
4	AW-01		WT 6	G	11/6/23	1440	4	X	X											
5	AW-05		WT 6	G	11/6/23	1547	4	X	X											
6	AW-06		WT 6	G	11/6/23	1250	4	X	X											
7	AW-08		WT 6	G	11/6/23	1613	4	X	X											
8	AW-09		WT 6	G	11/6/23	1115	4	X	X											
9	AW-10		WT 6	G	11/6/23	1440	4	X	X											
10	AW-11																			
11	AW-14																			
12	AW-15																			
13	AW-15S																			
14	AW-16																			
15	AW-17																			
16	AW-18																			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS				
EDW-23Q4-Rev 0		11/6/23	1704		11/6/23	1710	5.4	Y	Y	Y	Y

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	<u>Paron Amberlon</u>				
SIGNATURE of SAMPLER:					
DATE Signed (MM/DD/YY):		11/6/23			



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

December 04, 2023

Brian Voelker
Vistra - Edwards
604 Pierce Boulevard
O'Fallon, IL 62269

Dear Brian Voelker:

Please find enclosed the analytical results for the sample(s) the laboratory received. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of Pace Analytical Services, LLC.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

Pace Analytical Services appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the General Manager, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Sincerely,

A handwritten signature in black ink that reads "Diane Billings". The signature is written in a cursive, flowing style.

Diane Billings
Project Manager

SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order GK00258

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
YES	Zero headspace, <6 mm present in VOA vials
YES	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided

Work Order GK00654

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
YES	Zero headspace, <6 mm present in VOA vials
YES	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided

Work Order GK00898

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
YES	Zero headspace, <6 mm present in VOA vials
YES	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided

ANALYTICAL RESULTS

Sample: GK00258-04
Name: AW-20
Matrix: Ground Water - Grab

Sampled: 11/01/23 15:36
Received: 11/01/23 16:09

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	87	mg/L		11/08/23 16:57	10	10	11/08/23 16:57	CRD	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/08/23 16:39	1	0.250	11/08/23 16:39	CRD	EPA 300.0 REV 2.1
Sulfate	55	mg/L		11/08/23 16:57	10	10	11/08/23 16:57	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	16.9	Feet		11/01/23 15:36	1		11/01/23 15:36	FIELD	Field*
Dissolved oxygen, Field	0.80	mg/L		11/01/23 15:36	1		11/01/23 15:36	FIELD	Field*
Oxidation Reduction Potential	-77.0	mV		11/01/23 15:36	1	-500	11/01/23 15:36	FIELD	Field*
pH, Field Measured	6.95	pH Units		11/01/23 15:36	1		11/01/23 15:36	FIELD	Field*
Specific Conductance, Field Measured	1390	umhos/cm		11/01/23 15:36	1		11/01/23 15:36	FIELD	Field*
Temperature, Field Measured	14.4	°C		11/01/23 15:36	1		11/01/23 15:36	FIELD	Field*
Turbidity, Field Measured	94.2	NTU		11/01/23 15:36	1	0.00	11/01/23 15:36	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	580	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/13/23 09:44	1	10	11/13/23 09:44	CPS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	900	mg/L		11/02/23 10:02	1	26	11/02/23 11:10	LAL2	SM 2540C
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		11/02/23 08:47	5	3.0	11/09/23 12:37	TJJ	EPA 6020A
Arsenic	12	ug/L		11/02/23 08:47	5	1.0	11/10/23 11:44	TJJ	EPA 6020A
Barium	140	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:37	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/10/23 11:44	TJJ	EPA 6020A
Boron	3100	ug/L		11/02/23 08:47	5	10	11/10/23 11:44	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:37	TJJ	EPA 6020A
Calcium	150	mg/L		11/02/23 08:47	5	0.20	11/09/23 12:37	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/02/23 08:47	5	4.0	11/09/23 12:37	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/02/23 08:47	5	2.0	11/09/23 12:37	TJJ	EPA 6020A
Lead	1.3	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:37	TJJ	EPA 6020A
Magnesium	59	mg/L		11/02/23 08:47	5	0.10	11/09/23 12:37	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/02/23 08:47	5	0.20	11/09/23 12:37	TJJ	EPA 6020A
Molybdenum	2.3	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:37	TJJ	EPA 6020A
Potassium	1.2	mg/L		11/02/23 08:47	5	0.10	11/09/23 12:37	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/10/23 11:44	TJJ	EPA 6020A
Sodium	64	mg/L		11/02/23 08:47	5	0.10	11/09/23 12:37	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00258-04
Name: AW-20
Matrix: Ground Water - Grab

Sampled: 11/01/23 15:36
Received: 11/01/23 16:09

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/02/23 08:47	5	1.0	11/09/23 12:37	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/02/23 08:47	1	20	11/06/23 11:10	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00654-04
Name: AW-23
Matrix: Ground Water - Grab

Sampled: 11/03/23 11:30
Received: 11/03/23 15:03

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	35	mg/L		11/09/23 18:28	25	25	11/09/23 18:28	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/09/23 18:10	1	0.250	11/09/23 18:10	TMS	EPA 300.0 REV 2.1
Sulfate	180	mg/L		11/09/23 18:28	25	25	11/09/23 18:28	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	5.23	Feet		11/03/23 11:30	1		11/03/23 11:30	FIELD	Field*
Dissolved oxygen, Field	2.1	mg/L		11/03/23 11:30	1		11/03/23 11:30	FIELD	Field*
Oxidation Reduction Potential	108	mV		11/03/23 11:30	1	-500	11/03/23 11:30	FIELD	Field*
pH, Field Measured	6.80	pH Units		11/03/23 11:30	1		11/03/23 11:30	FIELD	Field*
Specific Conductance, Field Measured	1090	umhos/cm		11/03/23 11:30	1		11/03/23 11:30	FIELD	Field*
Temperature, Field Measured	15.2	°C		11/03/23 11:30	1		11/03/23 11:30	FIELD	Field*
Turbidity, Field Measured	>1000	NTU		11/03/23 11:30	1	0.00	11/03/23 11:30	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	380	mg/L		11/15/23 13:05	1	10	11/15/23 13:05	LAL2/CP S	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/23 13:05	1	10	11/15/23 13:05	LAL2/CP S	SM 2320B 1997*
Solids - total dissolved solids (TDS)	720	mg/L		11/08/23 14:24	1	26	11/08/23 15:45	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/06/23 09:04	5	3.0	11/14/23 14:44	TJJ	EPA 6020A
Arsenic	2.5	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:44	TJJ	EPA 6020A
Barium	310	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:44	TJJ	EPA 6020A
Beryllium	1.1	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:44	TJJ	EPA 6020A
Boron	600	ug/L		11/06/23 09:04	5	10	11/13/23 16:14	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:44	TJJ	EPA 6020A
Calcium	140	mg/L		11/06/23 09:04	5	0.20	11/14/23 14:44	TJJ	EPA 6020A
Chromium	28	ug/L		11/06/23 09:04	5	4.0	11/14/23 14:44	TJJ	EPA 6020A
Cobalt	19	ug/L		11/06/23 09:04	5	2.0	11/14/23 14:44	TJJ	EPA 6020A
Lead	9.6	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:44	TJJ	EPA 6020A
Magnesium	59	mg/L		11/06/23 09:04	5	0.10	11/14/23 14:44	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/06/23 09:04	5	0.20	11/14/23 14:44	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:44	TJJ	EPA 6020A
Potassium	5.3	mg/L		11/06/23 09:04	5	0.10	11/14/23 14:44	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 17:45	KMC	EPA 6020A
Sodium	47	mg/L		11/06/23 09:04	5	0.10	11/14/23 14:44	TJJ	EPA 6020A



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: GK00654-04
Name: AW-23
Matrix: Ground Water - Grab

Sampled: 11/03/23 11:30
Received: 11/03/23 15:03

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:44	TJJ	EPA 6020A
Lithium	38	ug/L		11/06/23 09:04	1	20	11/13/23 11:26	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00654-05
Name: EMW-05
Matrix: Ground Water - Grab

Sampled: 11/03/23 11:43
Received: 11/03/23 15:03

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	20	mg/L		11/09/23 19:04	5	5.0	11/09/23 19:04	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/09/23 18:46	1	0.250	11/09/23 18:46	TMS	EPA 300.0 REV 2.1
Sulfate	130	mg/L		11/09/23 19:22	25	25	11/09/23 19:22	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	21.42	Feet		11/03/23 11:43	1		11/03/23 11:43	FIELD	Field*
Dissolved oxygen, Field	0.010	mg/L		11/03/23 11:43	1		11/03/23 11:43	FIELD	Field*
Oxidation Reduction Potential	27.0	mV		11/03/23 11:43	1	-500	11/03/23 11:43	FIELD	Field*
pH, Field Measured	7.13	pH Units		11/03/23 11:43	1		11/03/23 11:43	FIELD	Field*
Specific Conductance, Field Measured	1230	umhos/cm		11/03/23 11:43	1		11/03/23 11:43	FIELD	Field*
Temperature, Field Measured	13.0	°C		11/03/23 11:43	1		11/03/23 11:43	FIELD	Field*
Turbidity, Field Measured	32.8	NTU		11/03/23 11:43	1	0.00	11/03/23 11:43	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	620	mg/L		11/15/23 13:05	1	10	11/15/23 13:05	LAL2/CP S	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/23 13:05	1	10	11/15/23 13:05	LAL2/CP S	SM 2320B 1997*
Solids - total dissolved solids (TDS)	860	mg/L		11/08/23 14:24	1	26	11/08/23 15:45	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/06/23 09:04	5	3.0	11/14/23 14:48	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:48	TJJ	EPA 6020A
Barium	53	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:48	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/13/23 16:17	TJJ	EPA 6020A
Boron	1500	ug/L		11/06/23 09:04	5	10	11/13/23 16:17	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:48	TJJ	EPA 6020A
Calcium	180	mg/L		11/06/23 09:04	5	0.20	11/14/23 14:48	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/06/23 09:04	5	4.0	11/14/23 14:48	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/06/23 09:04	5	2.0	11/14/23 14:48	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:48	TJJ	EPA 6020A
Magnesium	83	mg/L		11/06/23 09:04	5	0.10	11/14/23 14:48	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/06/23 09:04	5	0.20	11/14/23 14:48	TJJ	EPA 6020A
Molybdenum	1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:48	TJJ	EPA 6020A
Potassium	0.29	mg/L		11/06/23 09:04	5	0.10	11/14/23 14:48	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 17:49	KMC	EPA 6020A
Sodium	22	mg/L		11/06/23 09:04	5	0.10	11/14/23 14:48	TJJ	EPA 6020A



Pace Analytical Services, LLC

2231 W. Altorfer Drive

Peoria, IL 61615

(800)752-6651

ANALYTICAL RESULTS

Sample: GK00654-05
Name: EMW-05
Matrix: Ground Water - Grab

Sampled: 11/03/23 11:43

Received: 11/03/23 15:03

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/06/23 09:04	5	1.0	11/14/23 14:48	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/06/23 09:04	1	20	11/13/23 11:27	BRS	EPA 6010B

ANALYTICAL RESULTS

Sample: GK00898-02
Name: APW-01
Matrix: Ground Water - Grab

Sampled: 11/06/23 12:10
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	120	mg/L		11/10/23 16:55	50	50	11/10/23 16:55	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/10/23 16:37	1	0.250	11/10/23 16:37	TMS	EPA 300.0 REV 2.1
Sulfate	290	mg/L		11/10/23 16:55	50	50	11/10/23 16:55	TMS	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	6.05	Feet		11/06/23 12:10	1		11/06/23 12:10	FIELD	Field*
Dissolved oxygen, Field	2.7	mg/L		11/06/23 12:10	1		11/06/23 12:10	FIELD	Field*
Oxidation Reduction Potential	-97.0	mV		11/06/23 12:10	1	-500	11/06/23 12:10	FIELD	Field*
pH, Field Measured	6.91	pH Units		11/06/23 12:10	1		11/06/23 12:10	FIELD	Field*
Specific Conductance, Field Measured	1420	umhos/cm		11/06/23 12:10	1		11/06/23 12:10	FIELD	Field*
Temperature, Field Measured	16.2	°C		11/06/23 12:10	1		11/06/23 12:10	FIELD	Field*
Turbidity, Field Measured	490	NTU		11/06/23 12:10	1	0.00	11/06/23 12:10	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	360	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/23 17:00	1	10	11/16/23 12:07	CPS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	980	mg/L		11/09/23 12:50	1	26	11/09/23 14:48	OGS	SM 2540C
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		11/09/23 07:19	5	3.0	11/14/23 17:07	TJJ	EPA 6020A
Arsenic	14	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:07	TJJ	EPA 6020A
Barium	85	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:07	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/13/23 17:28	TJJ	EPA 6020A
Boron	1100	ug/L		11/09/23 07:19	5	10	11/13/23 17:28	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:07	TJJ	EPA 6020A
Calcium	170	mg/L		11/09/23 07:19	5	0.20	11/14/23 17:07	TJJ	EPA 6020A
Chromium	6.0	ug/L		11/09/23 07:19	5	4.0	11/14/23 17:07	TJJ	EPA 6020A
Cobalt	3.1	ug/L		11/09/23 07:19	5	2.0	11/14/23 17:07	TJJ	EPA 6020A
Lead	3.8	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:07	TJJ	EPA 6020A
Magnesium	76	mg/L		11/09/23 07:19	5	0.10	11/15/23 12:45	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/09/23 07:19	5	0.20	11/15/23 12:45	TJJ	EPA 6020A
Molybdenum	1.9	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:07	TJJ	EPA 6020A
Potassium	1.3	mg/L		11/09/23 07:19	5	0.10	11/14/23 17:07	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 15:59	KMC	EPA 6020A
Sodium	53	mg/L		11/09/23 07:19	5	0.10	11/15/23 12:45	TJJ	EPA 6020A

ANALYTICAL RESULTS

Sample: GK00898-02
Name: APW-01
Matrix: Ground Water - Grab

Sampled: 11/06/23 12:10
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/09/23 07:19	5	1.0	11/14/23 17:07	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/09/23 07:19	1	20	11/13/23 11:37	BRS	EPA 6010B

Sample: GK00898-12
Name: SG-02
Matrix: Ground Water

Sampled: 10/27/23 14:26
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
-----------	--------	------	-----------	----------	----------	-----	----------	---------	--------

Field - PIA

Depth, From Measuring Point	447.5	Feet		10/27/23 14:26	1		10/27/23 14:26	DAB	Field*
-----------------------------	-------	------	--	----------------	---	--	----------------	-----	--------

Sample: GK00898-13
Name: SG-03
Matrix: Ground Water

Sampled: 10/27/23 13:52
Received: 11/06/23 17:10

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
-----------	--------	------	-----------	----------	----------	-----	----------	---------	--------

Field - PIA

Depth, From Measuring Point	449.1	Feet		10/27/23 13:52	1		10/27/23 13:52	DAB	Field*
-----------------------------	-------	------	--	----------------	---	--	----------------	-----	--------

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B348049 - SW 3015 - EPA 6010B</u>									
Blank (B348049-BLK1)				Prepared: 11/02/23 Analyzed: 11/06/23					
Lithium	< 20	ug/L							
LCS (B348049-BS1)				Prepared: 11/02/23 Analyzed: 11/06/23					
Lithium	523	ug/L		555.6		94	80-120		
<u>Batch B348049 - SW 3015 - EPA 6020A</u>									
Blank (B348049-BLK1)				Prepared: 11/02/23 Analyzed: 11/09/23					
Antimony	< 3.0	ug/L							
Arsenic	< 1.0	ug/L							
Barium	< 1.0	ug/L							
Beryllium	< 1.0	ug/L							
Boron	< 10	ug/L							
Cadmium	< 1.0	ug/L							
Calcium	< 0.20	mg/L							
Chromium	< 4.0	ug/L							
Cobalt	< 2.0	ug/L							
Lead	< 1.0	ug/L							
Magnesium	< 0.10	mg/L							
Mercury	< 0.20	ug/L							
Molybdenum	< 1.0	ug/L							
Potassium	< 0.10	mg/L							
Selenium	< 1.0	ug/L							
Sodium	< 0.10	mg/L							
Thallium	< 1.0	ug/L							
Blank (B348049-BLK2)				Prepared: 11/02/23 Analyzed: 11/14/23					
Selenium	< 1.0	ug/L							
LCS (B348049-BS1)				Prepared: 11/02/23 Analyzed: 11/09/23					
Antimony	563	ug/L		555.6		101	80-120		
Arsenic	552	ug/L		555.6		99	80-120		
Barium	540	ug/L		555.6		97	80-120		
Beryllium	534	ug/L		555.6		96	80-120		
Boron	500	ug/L		555.6		90	80-120		
Cadmium	532	ug/L		555.6		96	80-120		
Calcium	5.60	mg/L		5.556		101	80-120		
Chromium	548	ug/L		555.6		99	80-120		
Cobalt	544	ug/L		555.6		98	80-120		
Lead	539	ug/L		555.6		97	80-120		
Magnesium	5.60	mg/L		5.556		101	80-120		
Mercury	52.1	ug/L		55.56		94	80-120		
Molybdenum	530	ug/L		555.6		95	80-120		
Potassium	5.47	mg/L		5.556		99	80-120		
Selenium	582	ug/L		555.6		105	80-120		
Sodium	5.59	mg/L		5.556		101	80-120		
Thallium	536	ug/L		555.6		97	80-120		
LCS (B348049-BS4)				Prepared: 11/02/23 Analyzed: 11/14/23					

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
LCS (B348049-BS4)				Prepared: 11/02/23 Analyzed: 11/14/23					
Selenium	587	ug/L		555.6		106	80-120		
<u>Batch B348082 - No Prep - SM 2540C</u>									
Blank (B348082-BLK1)				Prepared & Analyzed: 11/02/23					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B348082-BS1)				Prepared & Analyzed: 11/02/23					
Solids - total dissolved solids (TDS)	973	mg/L		1000		97	84.9-109		
Duplicate (B348082-DUP1)				Sample: GK00258-01		Prepared & Analyzed: 11/02/23			
Solids - total dissolved solids (TDS)	1010	mg/L			1040			2	5
Duplicate (B348082-DUP2)				Sample: GK00258-02		Prepared & Analyzed: 11/02/23			
Solids - total dissolved solids (TDS)	955	mg/L	M		795			18	5
<u>Batch B348302 - SW 3015 - EPA 6010B</u>									
Blank (B348302-BLK1)				Prepared: 11/06/23 Analyzed: 11/13/23					
Lithium	< 20	ug/L							
LCS (B348302-BS1)				Prepared: 11/06/23 Analyzed: 11/13/23					
Lithium	550	ug/L		555.6		99	80-120		
<u>Batch B348302 - SW 3015 - EPA 6020A</u>									
Blank (B348302-BLK1)				Prepared: 11/06/23 Analyzed: 11/14/23					
Antimony	< 3.0	ug/L							
Arsenic	< 1.0	ug/L							
Barium	< 1.0	ug/L							
Beryllium	< 1.0	ug/L							
Boron	< 10	ug/L							
Cadmium	< 1.0	ug/L							
Calcium	< 0.20	mg/L							
Chromium	< 4.0	ug/L							
Cobalt	< 2.0	ug/L							
Lead	< 1.0	ug/L							
Magnesium	< 0.10	mg/L							
Mercury	< 0.20	ug/L							
Molybdenum	< 1.0	ug/L							
Potassium	< 0.10	mg/L							
Selenium	< 1.0	ug/L							
Sodium	< 0.10	mg/L							
Thallium	< 1.0	ug/L							
LCS (B348302-BS1)				Prepared: 11/06/23 Analyzed: 11/14/23					
Antimony	547	ug/L		555.6		98	80-120		
Arsenic	559	ug/L		555.6		101	80-120		
Barium	526	ug/L		555.6		95	80-120		
Beryllium	586	ug/L		555.6		105	80-120		
Boron	543	ug/L		555.6		98	80-120		
Cadmium	555	ug/L		555.6		100	80-120		
Calcium	5.83	mg/L		5.556		105	80-120		
Chromium	584	ug/L		555.6		105	80-120		
Cobalt	597	ug/L		555.6		108	80-120		

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
LCS (B348302-BS1)				Prepared: 11/06/23 Analyzed: 11/14/23					
Lead	577	ug/L		555.6		104	80-120		
Magnesium	6.23	mg/L		5.556		112	80-120		
Mercury	53.6	ug/L		55.56		97	80-120		
Molybdenum	544	ug/L		555.6		98	80-120		
Potassium	6.12	mg/L		5.556		110	80-120		
Selenium	555	ug/L		555.6		100	80-120		
Sodium	6.25	mg/L		5.556		113	80-120		
Thallium	569	ug/L		555.6		102	80-120		
<u>Batch B348625 - No Prep - SM 2540C</u>									
Blank (B348625-BLK1)				Prepared & Analyzed: 11/08/23					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B348625-BS1)				Prepared & Analyzed: 11/08/23					
Solids - total dissolved solids (TDS)	940	mg/L		1000		94	84.9-109		
<u>Batch B348662 - SW 3015 - EPA 6010B</u>									
Blank (B348662-BLK1)				Prepared: 11/09/23 Analyzed: 11/13/23					
Lithium	< 20	ug/L							
LCS (B348662-BS1)				Prepared: 11/09/23 Analyzed: 11/13/23					
Lithium	573	ug/L		555.6		103	80-120		
Matrix Spike (B348662-MS1)				Sample: GK00898-01		Prepared: 11/09/23 Analyzed: 11/13/23			
Lithium	563	ug/L		555.6	31.7	96	75-125		
Matrix Spike Dup (B348662-MSD1)				Sample: GK00898-01		Prepared: 11/09/23 Analyzed: 11/13/23			
Lithium	580	ug/L		555.6	31.7	99	75-125	3	20
<u>Batch B348662 - SW 3015 - EPA 6020A</u>									
Blank (B348662-BLK1)				Prepared: 11/09/23 Analyzed: 11/14/23					
Antimony	< 3.0	ug/L							
Arsenic	< 1.0	ug/L							
Barium	< 1.0	ug/L							
Beryllium	< 1.0	ug/L							
Boron	< 10	ug/L							
Cadmium	< 1.0	ug/L							
Calcium	< 0.20	mg/L							
Chromium	< 4.0	ug/L							
Cobalt	< 2.0	ug/L							
Lead	< 1.0	ug/L							
Magnesium	< 0.10	mg/L							
Mercury	< 0.20	ug/L							
Molybdenum	< 1.0	ug/L							
Potassium	< 0.10	mg/L							
Selenium	< 1.0	ug/L							
Sodium	< 0.10	mg/L							
Thallium	< 1.0	ug/L							
LCS (B348662-BS1)				Prepared: 11/09/23 Analyzed: 11/14/23					
Antimony	545	ug/L		555.6		98	80-120		
Arsenic	552	ug/L		555.6		99	80-120		

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
LCS (B348662-BS1)				Prepared: 11/09/23 Analyzed: 11/14/23					
Barium	516	ug/L		555.6		93	80-120		
Beryllium	585	ug/L		555.6		105	80-120		
Boron	547	ug/L		555.6		99	80-120		
Cadmium	562	ug/L		555.6		101	80-120		
Calcium	6.38	mg/L		5.556		115	80-120		
Chromium	594	ug/L		555.6		107	80-120		
Cobalt	612	ug/L		555.6		110	80-120		
Lead	580	ug/L		555.6		104	80-120		
Magnesium	5.91	mg/L		5.556		106	80-120		
Mercury	51.2	ug/L		55.56		92	80-120		
Molybdenum	554	ug/L		555.6		100	80-120		
Potassium	6.17	mg/L		5.556		111	80-120		
Selenium	581	ug/L		555.6		105	80-120		
Sodium	5.93	mg/L		5.556		107	80-120		
Thallium	567	ug/L		555.6		102	80-120		
Matrix Spike (B348662-MS1)				Sample: GK00898-01		Prepared: 11/09/23 Analyzed: 11/14/23			
Antimony	510	ug/L		555.6	ND	92	75-125		
Arsenic	538	ug/L		555.6	2.67	96	75-125		
Barium	1600	ug/L		555.6	1040	100	75-125		
Beryllium	571	ug/L		555.6	ND	103	75-125		
Boron	869	ug/L		555.6	331	97	75-125		
Cadmium	554	ug/L		555.6	ND	100	75-125		
Calcium	114	mg/L		5.556	108	109	75-125		
Chromium	588	ug/L		555.6	6.66	105	75-125		
Cobalt	599	ug/L		555.6	4.17	107	75-125		
Lead	571	ug/L		555.6	3.84	102	75-125		
Magnesium	54.8	mg/L	Q4	5.556	48.4	115	75-125		
Mercury	54.1	ug/L		55.56	0.178	97	75-125		
Molybdenum	554	ug/L		555.6	0.817	100	75-125		
Potassium	10.3	mg/L		5.556	4.35	107	75-125		
Selenium	550	ug/L		555.6	0.472	99	75-125		
Thallium	552	ug/L		555.6	ND	99	75-125		
Matrix Spike Dup (B348662-MSD1)				Sample: GK00898-01		Prepared: 11/09/23 Analyzed: 11/14/23			
Antimony	512	ug/L		555.6	ND	92	75-125	0.3	20
Arsenic	541	ug/L		555.6	2.67	97	75-125	0.6	20
Barium	1590	ug/L		555.6	1040	98	75-125	0.7	20
Beryllium	586	ug/L		555.6	ND	106	75-125	3	20
Boron	876	ug/L		555.6	331	98	75-125	0.8	20
Cadmium	558	ug/L		555.6	ND	100	75-125	0.8	20
Calcium	112	mg/L		5.556	108	83	75-125	1	20
Chromium	587	ug/L		555.6	6.66	104	75-125	0.1	20
Cobalt	604	ug/L		555.6	4.17	108	75-125	0.7	20
Lead	570	ug/L		555.6	3.84	102	75-125	0.2	20
Magnesium	54.5	mg/L	Q4	5.556	48.4	110	75-125	0.5	20
Mercury	54.5	ug/L		55.56	0.178	98	75-125	0.6	20
Molybdenum	558	ug/L		555.6	0.817	100	75-125	0.8	20
Potassium	10.3	mg/L		5.556	4.35	106	75-125	0.6	20

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike Dup (B348662-MSD1)				Sample: GK00898-01		Prepared: 11/09/23 Analyzed: 11/14/23			
Selenium	551	ug/L		555.6	0.472	99	75-125	0.3	20
Thallium	551	ug/L		555.6	ND	99	75-125	0.2	20
<u>Batch B348707 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B348707-CCB1)				Prepared & Analyzed: 11/08/23					
Chloride	0.00	mg/L							
Sulfate	0.00	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B348707-CCV1)				Prepared & Analyzed: 11/08/23					
Fluoride	5.20	mg/L		5.000		104	90-110		
Sulfate	4.95	mg/L		5.000		99	90-110		
Chloride	5.05	mg/L		5.000		101	90-110		
Matrix Spike (B348707-MS1)				Sample: GK00258-01		Prepared & Analyzed: 11/08/23			
Fluoride	1.24	mg/L	Q1	1.500	0.0458	80	80-120		
Sulfate	1.50	mg/L		1.500	ND	100	80-120		
Chloride	< 1.0	mg/L	Q4	1.500	53	NR	80-120		
Matrix Spike Dup (B348707-MSD1)				Sample: GK00258-01		Prepared & Analyzed: 11/08/23			
Sulfate	1.36	mg/L		1.500	ND	91	80-120	10	20
Fluoride	1.21	mg/L	Q2	1.500	0.0458	77	80-120	3	20
Chloride	< 1.0	mg/L	Q4	1.500	53	NR	80-120		20
<u>Batch B348728 - No Prep - SM 2540C</u>									
Blank (B348728-BLK1)				Prepared & Analyzed: 11/09/23					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B348728-BS1)				Prepared & Analyzed: 11/09/23					
Solids - total dissolved solids (TDS)	953	mg/L		1000		95	84.9-109		
Duplicate (B348728-DUP1)				Sample: GK00898-02		Prepared & Analyzed: 11/09/23			
Solids - total dissolved solids (TDS)	945	mg/L			975			3	5
Duplicate (B348728-DUP2)				Sample: GK00898-06		Prepared & Analyzed: 11/09/23			
Solids - total dissolved solids (TDS)	695	mg/L			725			4	5
<u>Batch B348876 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B348876-CCB1)				Prepared & Analyzed: 11/09/23					
Chloride	0.00	mg/L							
Fluoride	0.00	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B348876-CCV1)				Prepared & Analyzed: 11/09/23					
Fluoride	4.92	mg/L		5.000		98	90-110		
Sulfate	4.85	mg/L		5.000		97	90-110		
Chloride	4.84	mg/L		5.000		97	90-110		
Matrix Spike (B348876-MS1)				Sample: GK00654-01		Prepared & Analyzed: 11/09/23			
Fluoride	1.63	mg/L		1.500	0.229	93	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	184	NR	80-120		
Chloride	1.0E9	mg/L	Q4	1.500	73	NR	80-120		
Matrix Spike Dup (B348876-MSD1)				Sample: GK00654-01		Prepared & Analyzed: 11/09/23			
Sulfate	1.00E9	mg/L	Q4	1.500	184	NR	80-120	0	20
Fluoride	1.64	mg/L		1.500	0.229	94	80-120	1	20

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike Dup (B348876-MSD1)				Sample: GK00654-01		Prepared & Analyzed: 11/09/23			
Chloride	1.0E9	mg/L	Q4	1.500	73	NR	80-120	0	20
<u>Batch B349001 - No Prep - SM 2320B 1997</u>									
Duplicate (B349001-DUP2)				Sample: GK00258-01		Prepared & Analyzed: 11/13/23			
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO3	875	mg/L			888			1	10
<u>Batch B349006 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B349006-CCB1)				Prepared & Analyzed: 11/10/23					
Fluoride	0.00	mg/L							
Chloride	0.155	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B349006-CCV1)				Prepared & Analyzed: 11/10/23					
Sulfate	5.16	mg/L		5.000		103	90-110		
Fluoride	5.19	mg/L		5.000		104	90-110		
Chloride	5.08	mg/L		5.000		102	90-110		
Matrix Spike (B349006-MS1)				Sample: GK00898-01		Prepared & Analyzed: 11/10/23			
Chloride	< 1.0	mg/L	Q4	1.500	46	NR	80-120		
Fluoride	1.30	mg/L		1.500	ND	86	80-120		
Sulfate	2.41	mg/L	Q1	1.500	ND	160	80-120		
Matrix Spike Dup (B349006-MSD1)				Sample: GK00898-01		Prepared & Analyzed: 11/10/23			
Chloride	< 1.0	mg/L	Q4	1.500	46	NR	80-120		20
Fluoride	1.29	mg/L		1.500	ND	86	80-120	0.6	20
Sulfate	2.39	mg/L	Q2	1.500	ND	159	80-120	0.8	20
<u>Batch B349286 - No Prep - SM 2320B 1997</u>									
Duplicate (B349286-DUP1)				Sample: GK00654-01		Prepared & Analyzed: 11/15/23			
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO3	300	mg/L			312			4	10

NOTES

Specifications regarding method revisions, method modifications, and calculations used for analysis are available upon request. Please contact your project manager.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050

TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615

TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553

Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)

Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807

USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050

Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Qualifiers

- M Analyte failed to meet the required acceptance criteria for duplicate analysis.
- Q1 Matrix Spike failed % recovery acceptance limits. The associated blank spike recovery was acceptable.
- Q2 Matrix Spike Duplicate failed % recovery acceptance limits. The associated blank spike recovery was acceptable.
- Q4 The matrix spike recovery result is unusable since the analyte concentration in the sample is greater than four times the spike level. The associated blank spike was acceptable.



Certified by: Diane Billings, Project Manager



SAR-3: Episodic Depth to Groundwater Measurements
All DTWs on SAR-3 must be collected within 24 hours.

Plant: EDW
Event: EDW-23Q4 Rev 0

Well	Unique ID	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
AP05S	EDW_AP05#S	10/27/23	1610	6.23		BG
AP07S	EDW_AP07#S		1413	25.38		
AP08	EDW_AP08		1342	9.10		
AP09	EDW_AP09		1331	10.82		
APW-01	EDW_APW-01		1612	5.73		
AW-01	EDW_AW-01		1501	10.12		
AW-05	EDW_AW-05		1317	8.43		
AW-06	EDW_AW-06		1455	27.48		
AW-08	EDW_AW-08		1506	25.41		
AW-09	EDW_AW-09		1531	27.29		
AW-10	EDW_AW-10		1512	2.33		
AW-11	EDW_AW-11		1517	7.03		
AW-14	EDW_AW-14		1520	8.30		
AW-15	EDW_AW-15		1522	10.02		
AW-15S	EDW_AW-15#S		1524	10.04		
AW-16	EDW_AW-16		1439	25.92		
AW-17	EDW_AW-17		1435	26.56		
AW-18	EDW_AW-18		1431	28.00		
AW-19	EDW_AW-19		1351	19.16		
AW-20	EDW_AW-20		1356	17.10		
AW-21	EDW_AW-21		1359	17.80		
AW-23	EDW_AW-23		1625	5.46		
EMW-05	EDW_EMW-05		1448	21.67		

SAR-3: Episodic Depth to Groundwater Measurements

All DTWs on SAR-3 must be collected within 24 hours.

Plant: EDW

Event: EDW-23Q4 Rev 0

Well	Unique ID	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
OW-01	EDW_OW-01	10/27/23	1415	24.22		BG
OW-02	EDW_OW-02		1526	9.71		
PTW-01	EDW_PTW-01		1410	25.94		
PTW-02	EDW_PTW-02		1522	9.42		
XPW01A	EDW_XPW01A_pore		1346	11.89		
XPW02	EDW_XPW02_pore		1340	21.63		
XPW03	EDW_XPW03_pore		1335	18.23		
SG-01	EDW_YILRIVER		1546	34.43	431 BG 11/6/23	
SG-02	EDW_YSG-02		1426	447.5	SG Not in Water	
SG-03	EDW_YSG-03	—	1352	449.1		

U:6/21/23 GKJ

SAR-4: Depth to Groundwater Measurements - On-site Transducer Downloads
All DTWs on SAR-4 form may be collected at anytime during the sampling event.
 Plant: EDW
 Event: EDW-23Q4 Rev 0

Well	Unique ID	Date	Time	Measured Depth to Water (ft bmp)	Data Logger Serial No.	On-site Transducer Data					Comments	Initials
						Does Data Logger Serial No. Match?	WL Reading on Transducer (ft)	Data down-loaded?	Batt (H/M/L/R)			
AP05S	EDW_AP05#S	10/27/23	1610	6.23	21629301	No Transducer	N/A	N	N/A			BG
AP07S	EDW_AP07#S		1413	25.38	21615552							
AW-01	EDW_AW-01		1501	10.12	21615144							
AW-05	EDW_AW-05		1317	8.43	21615132							
AW-06	EDW_AW-06		1455	27.48	21615127							
AW-08	EDW_AW-08		1506	25.41	21615722							
AW-09	EDW_AW-09		1531	27.29	21615130							
AW-10	EDW_AW-10		1512	2.33	21615754							
AW-11	EDW_AW-11		1517	7.03	21615129							
AW-15	EDW_AW-15		1522	10.02	21615761							
AW-15S	EDW_AW-15#S		1524	10.04	21629298							
AW-16	EDW_AW-16		1439	25.92	21615714							
AW-17	EDW_AW-17		1435	26.56	21615756							
AW-18	EDW_AW-18		1431	28.00	21615763							
AW-19	EDW_AW-19		1351	19.10	21615718							
AW-21	EDW_AW-21		1359	17.80	21615514							
EMW-05	EDW_EMW-05		1448	21.67	21615739							

SAR-4: Depth to Groundwater Measurements - On-site Transducer Downloads
All DTWs on SAR-4 form may be collected at anytime during the sampling event.
 Plant: EDW
 Event: EDW-23Q4 Rev 0

Well	Unique ID	Date	Time	Measured Depth to Water (ft bmp)	Data Logger Serial No.	On-site Transducer Data					Comments	Initials
						Does Data Logger Serial No. Match?	WL Reading on Transducer (ft)	Data down-loaded?	Batt (H/M/L/R)			
XPW01A	EDW_XPW01A_pore	0/27/23	1346	11.89	21615740	No Transducer	N/A	N	N/A			BG
XPW02	EDW_XPW02_pore		1340	21.63	21615752							
XPW03	EDW_XPW03_pore		1335	18.23	21629300							
SG-01	EDW_YILRIVER		1546	34.43	TBD							

U: 6/21/23 GKJ

Notes:

- Batt = battery
- bmp = below measuring point
- ft = feet
- H = high
- L = low
- M = medium
- R = replaced

ATTORNEY-CLIENT PRIVILEGED AND CONFIDENTIAL
EDWARDS EMW

WELL: EMW-05 Purge Method: BLADPETZ
 Date: 11/3/23 Start Time: 0940 Finish/Sample Time: 1143
 Well Depth (Bottom) From MP: — ft Min. Purge Volume: — Gal / L
 Depth to Water From MP: 21.42 ft Total Purge Volume: 1000 Gal / L (22)
 Water Column Length: — ft Max Drawdown: — ft
 Well Water Volume: — Gal / L Total Drawdown: 6.59 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1016	23.92	100	7.17	1230	13.02	24	.01	33.9
2	1017	24.00	100	7.15	1230	13.01	25	.02	34.0
3	1018	24.07	100	7.13	1230	13.05	27	.01	32.8
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:
 Odor: None Slight Mod. Strong
 Color: None Slight Mod. Strong
 Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	X	
Casing locked/secure	X	
Well cap fits securely.	X	
Good seal/drainage	X	
Well has weep holes	X	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	HNO3 2.5L
1	General 1000mL

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)
1	General 1000mL

~~Ferrous Iron~~ 28.01 mg/L
 FINAL DTW

Comments _____

Sampler's Signature: [Signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT APW-01

Purge Method: Dedicated pump

Date: 11/6/2023 Start Time: 1113 Finish/Sample Time: 1210

Well Depth (Bottom) From MP: — ft Min. Purge Volume: — Gal / L

Depth to Water From MP: 6.05 ft Total Purge Volume: 1000 Gal / L (1000)

Water Column Length: — ft Max Drawdown: — ft

Well Water Volume: — Gal / L Total Drawdown: 0.05 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1135	6.10	200	6.92	1370	16.28	-95	2.84	519
2	1137	6.10	200	6.92	1400	16.21	-96	2.79	492
3	1139	6.10	200	6.91	1420	16.20	-97	2.72	490
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horib-

Sample Appearance:

Odor: None Slight Mod. Strong

Color: None Slight Mod. Strong

Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Casing locked/secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well cap fits securely.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Good seal/drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well has weep holes	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) 1000 mL
1	RAE (P, 2.5L, HNO3)

4

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 500mL) 1000 mL

Final D_{7W} Ferrous Iron 6.10 mg/L

Comments New Dedicated pump installed to stable water level pumped at 200 mL/min for

Sampler's Signature: [Signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-20

Purge Method: Deaerated pump

Date: 11/1/2023 Start Time: 1424 Finish/Sample Time: 1536

Well Depth (Bottom) From MP: ft Min. Purge Volume: Gal / L
 Depth to Water From MP: 16.90 ft Total Purge Volume: 1000 Gal / L (ml)
 Water Column Length: ft Max Drawdown: ft
 Well Water Volume: Gal / L Total Drawdown: 0.40 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1442	17.30	100	6.95	1390	14.29	-74	0.98	71.4
2	1444	17.30	100	6.45	1390	14.34	-76	0.92	85.1
3	1446	17.30	100	6.95	1390	14.41	-77	0.80	94.2
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:
 Odor: None Slight Mod. Strong
 Color: None Slight Mod. Strong
 Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Casing locked/secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well cap fits securely.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Good seal/drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well has weep holes	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) 1000 mL
1	Rad (p, 2.5L, HNO3)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 500mL) 1000 mL

Final DTW 17.30 FL
~~Ferrous Iron~~ mg/L

Comments

Sampler's Signature: [Signature]

WELL/SAMPLE POINT AW-23

Purge Method: Dedicated pump

Date: 11/3/2023 Start Time: 1045 Finish/Sample Time: 1130

Well Depth (Bottom) From MP: - ft Min. Purge Volume: - Gal / L

Depth to Water From MP: 5.23 ft Total Purge Volume: 1000 Gal / L (mL)

Water Column Length: - ft Max Drawdown: - ft

Well Water Volume: - Gal / L Total Drawdown: 0.07 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1102	5.30	200	6.82	1090	15.24	119	2.14	>1000
2	1104	5.30	200	6.82	1090	15.24	112	2.07	>1000
3	1106	5.30	200	6.80	1090	15.25	108	2.07	>1000
4	_____								
5	_____								
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Holibr

Sample Appearance:

Odor: None Slight Mod. Strong

Color: None Slight Mod. Strong

Turb: None Slight Mod Strong

Well Integrity	Yes	No
Well has ID sign	✓	
Casing locked/secure	✓	
Well cap fits securely.	✓	
Good seal/drainage	✓	
Well has weep holes	✓	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) 1000mL
1	Rad. (P, 2.5L, HNO3)

(4)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 500mL) 1000mL

Final Dilution 5.30 mg/L
 Ferrous Iron

Comments: Dedicated pump installed well pumped at 200 ml/min due to stable water level

Sampler's Signature: [Signature]

Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Aaron Pemberton</u>				Location: <u>Edwards</u>					
Weather: <u>42° Sunny</u> <u>win sw am</u>				Environment: <u>grass, gravel, dirt</u>					
Multiparameter Water Meter		Make: <u>Hori:bn</u>	Model: <u>V5000</u>	Serial Number: <u>6US83085</u>					
Water Level Meter		Make: <u>Solinst</u>	Model: <u>101</u>	Serial Number: <u>33459</u>					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.09</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>6.97</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>10.00</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	022361-01	12/27/2024
SC Zero (DI)	<u>10</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>NO</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2080</u>	µS/cm	±5%	<u>P</u>	<u>NO</u>	<u>N/A</u>	Geotech	3GF1197	Jun-24
ORP	<u>237</u>	mV	±15 mV	<u>P</u>	<u>NO</u>	<u>N/A</u>	InSitu	3GD927	Jan-24
DO (Zero pt)	<u>0.08</u>	mg/L	±0.1	<u>P</u>	<u>NO</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>19.2</u>	%	97-100%	<u>P</u>	<u>NO</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>NO</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

241 @ 16°C

ICV (Initial Calibration Verification)						Time: <u>0920</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>4.08</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N/A</u>	Geotech	3GB1049	Feb-25	
pH 7.00b	<u>6.95</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N/A</u>	Geotech	2GF113	Jun-24	
pH 10.00b	<u>10.06</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N/A</u>	Geotech	3GA1134	Jan-25	
SC 1000	<u>1020</u>	µS/cm	±5%	<u>P</u>	<u>N/A</u>	Ricca	4209A12	Aug-24	

Approx. every 4 hrs, unless only one well

AP 11/11/23

CCV (Continued Calibration Verification):						Time: <u>1451</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.06</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>7.02</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>10.05</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	022361-01	12/27/2024
SC 1000	<u>1010</u>	µS/cm	±5%	<u>P</u>	<u>NO</u>	<u>N/A</u>	Ricca	4209A12	Aug-24
DO (Zero pt)	<u>0.09</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>NO</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>NO</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a	 	s.u.	±0.1 s.u.	 	 	 	MSI	023067-01	3/14/2025
7.00a	 	s.u.	±0.1 s.u.	 	 	 	MSI	023051-02	2/21/2025
10.00a	 	s.u.	±0.1 s.u.	 	 	 	MSI	022361-01	12/27/2024
SC 1000	 	µS/cm	±5%	 	 	 	Ricca	4209A12	Aug-24
DO (Zero pt)	 	mg/L	±0.1 mg/L	 	 	 	Macron	#000228049	8/26/2025
Turbidity (DI)	 	NTU	<2 NTU	 	 	 	Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: 	Date: <u>11/11/2023</u>
--	-------------------------

Multiparameter Meter Field Calibration Checklist

Field Personnel:	Aaron Kimberlin			Location:	Edwards	
Weather:	45°-58° Sunny Wind SW 13 mph			Environment:	Grass, gravel, silt	
Multiparameter Water Meter	Make:	Hoviba	Model:	US000	Serial Number:	6US83C85
Water Level Meter	Make:	Heron	Model:	Dipart	Serial Number:	11FF220930SML

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.99	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023067-01	3/14/2025
pH 7.00a	6.99	s.u.	±0.1 s.u.	P			MSI	023051-02	2/21/2025
pH 10.00a	9.94	s.u.	±0.1 s.u.	P			MSI	022361-01	12/27/2024
SC Zero (DI)	20	µS/cm	0<25 µS/cm	P			Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2020	µS/cm	±5%	P			Geotech	3GF1197	Jun-24
ORP	231	mV	±15 mV	P			InSitu	3GD927	Jan-24
DO (Zero pt)	0.09	mg/L	±0.1	P			Macron	#000228049	8/26/2025
DO (Saturated)	98.6	%	97-100%	P			Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	P			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

240 @ 17°C

ICV (Initial Calibration Verification)					Time:					
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.		
pH 4.00b	4.00	s.u.	±0.15 s.u.	P	N/A	Geotech	3GB1049	Feb-25		
pH 7.00b	6.87	s.u.	±0.15 s.u.	P		Geotech	2GF113	Jun-24		
pH 10.00b	9.94 10.10	s.u.	±0.15 s.u.	P		Geotech	3GA1134	Jan-25		
SC 1000	989	µS/cm	±5%	P		Ricca	4209A12	Aug-24		

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.	
pH 4.00a	4.03	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023067-01	3/14/2025	
pH 7.00a	7.01	s.u.	±0.1 s.u.	P			MSI	023051-02	2/21/2025	
pH 10.00a	10.05	s.u.	±0.1 s.u.	P			MSI	022361-01	12/27/2024	
SC 1000	993	µS/cm	±5%	P			Ricca	4209A12	Aug-24	
DO (Zero pt)	0.09	mg/L	±0.1 mg/L	P			Macron	#000228049	8/26/2025	
Turbidity (DI)	0.0	NTU	<2 NTU	P			Pace Labs	N/A (DI)	N/A (DI)	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.	
4.00a	/	s.u.	±0.1 s.u.	/	/	/	MSI	023067-01	3/14/2025	
7.00a	/	s.u.	±0.1 s.u.	/	/	/	MSI	023051-02	2/21/2025	
10.00a	/	s.u.	±0.1 s.u.	/	/	/	MSI	022361-01	12/27/2024	
SC 1000	/	µS/cm	±5%	/	/	/	Ricca	4209A12	Aug-24	
DO (Zero pt)	/	mg/L	±0.1 mg/L	/	/	/	Macron	#000228049	8/26/2025	
Turbidity (DI)	/	NTU	<2 NTU	/	/	/	Pace Labs	N/A (DI)	N/A (DI)	

Comments:

Signature:		Date:	11/3/2023
------------	---	-------	-----------

Multiparameter Meter Field Calibration Checklist

Field Personnel: Logan Ross			Location: EDWARDS POWERSTATION						
Weather: CLOUDY 4P-6P 16mph S			Environment: GRASSLAND						
Multiparameter Water Meter		Make: HORIBA	Model: U-5000	Serial Number: PW26YJD3					
Water Level Meter		Make: HERRON	Model: differ-t	Serial Number: 377-T					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.67	s.u.	±0.1 s.u.	F	Y	4.00	MSI	023067-01	3/14/2025
pH 7.00a	6.98	s.u.	±0.1 s.u.	P	N	NA	MSI	023051-02	2/21/2025
pH 10.00a	10.08	s.u.	±0.1 s.u.	P	N	NA	MSI	022361-01	12/27/2024
SC Zero (DI)	0.0	µS/cm	0<25 µS/cm	P	N	NA	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1920	µS/cm	±5%	P	N	NA	Geotech	3GF1197	Jun-24
ORP	271	mV	±15 mV	F	Y	241	InSitu	3GD927	Jan-24
DO (Zero pt)	.00	mg/L	±0.1	P	N	NA	Macron	#000228049	8/26/2025
DO (Saturated)	98.7	%	97-100%	P	N	NA	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	P	N	NA	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)

Time: **0845**

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	3.98	s.u.	±0.15 s.u.	P	NA	Geotech	3GB1049	Feb-25
pH 7.00b	7.02	s.u.	±0.15 s.u.	P	NA	Geotech	2GF113	Jun-24
pH 10.00b	9.80	s.u.	±0.15 s.u.	P	NA	Geotech	3GA1134	Jan-25
SC 1000	1040	µS/cm	±5%	P	NA	Ricca	4209A12	Aug-24

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):

Time: **151**

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.02	s.u.	±0.1 s.u.	P	N	NA	MSI	023067-01	3/14/2025
pH 7.00a	6.92	s.u.	±0.1 s.u.	P	N	NA	MSI	023051-02	2/21/2025
pH 10.00a	9.97	s.u.	±0.1 s.u.	P	N	NA	MSI	022361-01	12/27/2024
SC 1000	1040	µS/cm	±5%	P	N	NA	Ricca	4209A12	Aug-24
DO (Zero pt)	0.0	mg/L	±0.1 mg/L	P	N	NA	Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	P	N	NA	Pace Labs	N/A (DI)	N/A (DI)


Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):

Time:

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a	 	s.u.	±0.1 s.u.	 	 	 	MSI	023067-01	3/14/2025
7.00a	 	s.u.	±0.1 s.u.	 	 	 	MSI	023051-02	2/21/2025
10.00a	 	s.u.	±0.1 s.u.	 	 	 	MSI	022361-01	12/27/2024
SC 1000	 	µS/cm	±5%	 	 	 	Ricca	4209A12	Aug-24
DO (Zero pt)	 	mg/L	±0.1 mg/L	 	 	 	Macron	#000228049	8/26/2025
Turbidity (DI)	 	NTU	<2 NTU	 	 	 	Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature:		Date:	11/3/23
------------	---	-------	----------------

Multiparameter Meter Field Calibration Checklist

Field Personnel: <i>Aaron Pemberton</i>			Location: <i>Edwards</i>		
Weather: <i>62° - 69° Wind SW 4-5 mph</i>			Environment: <i>to grass gravel</i>		
Multiparameter Water Meter	Make: <i>Heron</i>	Model: <i>VS000</i>	Serial Number: <i>W0683185</i>		
Water Level Meter	Make: <i>Heron</i>	Model: <i>D:port</i>	Serial Number: <i>3717-T</i>		

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<i>4.08</i>	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023067-01	3/14/2025
pH 7.00a	<i>7.06</i>	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023051-02	2/21/2025
pH 10.00a	<i>10.02</i>	s.u.	±0.1 s.u.	P	NO	N/A	MSI	022361-01	12/27/2024
SC Zero (DI)	<i>20</i>	µS/cm	0 < 25 µS/cm	P	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<i>1950</i>	µS/cm	±5%	P	NO	N/A	Geotech	3GF1197	Jan-24
ORP	<i>226</i>	mV	±15 mV	P	NO	N/A	InSitu	3GD927	Jan-24
DO (Zero pt)	<i>0.04</i>	mg/L	±0.1	P	NO	N/A	Macron	#000228049	8/26/2025
DO (Saturated)	<i>10.2</i>	%	97-100%	P	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<i>0.0</i>	NTU	< 2 NTU	P	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: <i>0941</i>	<i>23.6 @ 20°C</i>		
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<i>4.02</i>	s.u.	±0.15 s.u.	P	N/A	Geotech	3GB1049	Feb-25	
pH 7.00b	<i>7.85</i>	s.u.	±0.15 s.u.	P	N/A	Geotech	2GF113	Jun-24	
pH 10.00b	<i>10.03</i>	s.u.	±0.15 s.u.	P	N/A	Geotech	3GA1134	Jan-25	
SC 1000	<i>1010</i>	µS/cm	±5%	P	N/A	Ricca	4209A12	Aug-24	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: <i>1558</i>			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<i>4.03</i>	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023067-01	3/14/2025
pH 7.00a	<i>7.01</i>	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023051-02	2/21/2025
pH 10.00a	<i>10.05</i>	s.u.	±0.1 s.u.	P	NO	N/A	MSI	022361-01	12/27/2024
SC 1000	<i>1030</i>	µS/cm	±5%	P	NO	N/A	Ricca	4209A12	Aug-24
DO (Zero pt)	<i>0.09</i>	mg/L	±0.1 mg/L	P	NO	N/A	Macron	#000228049	8/26/2025
Turbidity (DI)	<i>0.0</i>	NTU	< 2 NTU	P	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.	P	NO	N/A	MSI	023067-01	3/14/2025
7.00a		s.u.	±0.1 s.u.	P	NO	N/A	MSI	023051-02	2/21/2025
10.00a		s.u.	±0.1 s.u.	P	NO	N/A	MSI	022361-01	12/27/2024
SC 1000		µS/cm	±5%	P	NO	N/A	Ricca	4209A12	Aug-24
DO (Zero pt)		mg/L	±0.1 mg/L	P	NO	N/A	Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	< 2 NTU	P	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature:	Date: <i>11/6/2023</i>
------------	------------------------

Multiparameter Meter Field Calibration Checklist

Field Personnel: Joe Reed			Location: Edward Power Station						
Weather: 55-70°F mostly sunny			Environment: Muddy/grassy						
Multiparameter Water Meter	Make: Horiba	Model: V5000	Serial Number: Y29KJ9HA						
Water Level Meter	Make: Horin	Model: Series 1900	Serial Number: 19FF211192HB						
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.05	s.u.	±0.1 s.u.	P	N	/	MSI	023067-01	3/14/2025
pH 7.00a	6.98	s.u.	±0.1 s.u.	P	N		MSI	023051-02	2/21/2025
pH 10.00a	10.07	s.u.	±0.1 s.u.	P	N		MSI	022361-01	12/27/2024
SC Zero (DI)	2	µS/cm	0<25 µS/cm	P	N		Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2010	µS/cm	±5%	P	N		Geotech	3GF1197	Jun-24
ORP	241	mV	±15 mV	P	N		InSitu	3GD927	Jan-24
DO (Zero pt)	0.05	mg/L	±0.1	P	N		Macron	#000228049	8/26/2025
DO (Saturated)	99.7	%	97-100%	P	N		Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	P	N		Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: 940		
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.00	s.u.	±0.15 s.u.	P	N	Geotech	3GB1049	Feb-25
pH 7.00b	6.97	s.u.	±0.15 s.u.	P	N	Geotech	2GF113	Jun-24
pH 10.00b	10.05	s.u.	±0.15 s.u.	P	N	Geotech	3GA1134	Jan-25
SC 1000	1050	µS/cm	±5%	P	N	Ricca	4209A12	Aug-24

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: 1630			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.07	s.u.	±0.1 s.u.	P	N	/	MSI	023067-01	3/14/2025
pH 7.00a	7.03	s.u.	±0.1 s.u.	P	N		MSI	023051-02	2/21/2025
pH 10.00a	10.05	s.u.	±0.1 s.u.	P	N		MSI	022361-01	12/27/2024
SC 1000	1010	µS/cm	±5%	P	N		Ricca	4209A12	Aug-24
DO (Zero pt)	0.01	mg/L	±0.1 mg/L	P	N		Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	P	N		Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	023067-01	3/14/2025
7.00a		s.u.	±0.1 s.u.				MSI	023051-02	2/21/2025
10.00a		s.u.	±0.1 s.u.				MSI	022361-01	12/27/2024
SC 1000		µS/cm	±5%				Ricca	4209A12	Aug-24
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: Joe Reed	Date: 11/6/23
----------------------------	----------------------

BG

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 2

Section A
Required Client Information:
Company: Vistra Corp-Edwards
Address: 7800 Cilco Lane
Peoria, IL 61607
Email To: Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911
Requested Due Date/TAT: 10 day

Section B
Required Project Information:
Report To: Brian Voelker
Copy To: Sam Davies-samantha.davies@vistracorp.com
Mark Davis-Mark.Davis1@vistracorp.com
Purchase Order No.:
Project Name:
Project Number: 2285

Section C
Invoice Information:
Attention: Mark Davis
Company Name: Vistra Corp-Edwards
Address: see Section A
Quote Reference:
Project Manager:
Profile #:

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL OL WIPE WP WAX WX OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		# OF CONTAINERS	Preservatives Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	Requested Analysis Filtered (Y/N)	Project No./ Lab I.D.
					DATE	TIME				
1										
2			WT G	G	11/3/23	1320	4	X		
3										
4										
5										
6										
7										
8										
9										
10			WT G	G	11/3/23	1410	4	X		
11			WT G	G	11/3/23	1314	4	X		
12										
13										
14										
15										
16										

ADDITIONAL COMMENTS
EDW-23Q4-Rev 0

RELINQUISHED BY / AFFILIATION: [Signature] DATE: 11/3/23 TIME: 1503

ACCEPTED BY / AFFILIATION: [Signature] DATE: 11/3/23 TIME: 1503

Temp in C: 10.7

Received on Ice (Y/N): Y

Custody Sealed Cooler (Y/N): N

Samples Intact (Y/N): Y

SAMPLER NAME AND SIGNATURE: [Signature]
PRINT Name of SAMPLER: [Name]
SIGNATURE of SAMPLER: [Signature]

DATE Signed (MM/DD/YYYY): 11/03/23

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:	Page: 2 of 2
Company: Vistra Corp-Edwards	Report To: Brian Voelker	Attention: Mark Davis	
Address: 7800 Cilco Lane	Copy To: Sam Davies-samantha.davies@vistracorp.com	Company Name: Vistra Corp-Edwards	
Peoria, IL 61607	Mark Davis-Mark.Davis1@vistracorp.com	Address: see Section A	
Email To: Brian.Voelker@VistraCorp.com	Purchase Order No.:	Quote Reference:	
Phone: (217) 753-8911	Project Name:	Project Manager:	
Fax:	Project Number: 2285	Profile #:	
Requested Due Date/TAT: 10 day			

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WASTE WATER WW PRODUCT P LIQUID L SOLID S WIFE W AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		# OF CONTAINERS	Preservatives Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	Y/N ↑	Requested Analysis Filtered (Y/N)	Project No./ Lab I.D.
					DATE	TIME					
1	AW-19										
2	AW-20										
3	AW-21										
4	AW-23		WT-6	G	11/3/23	1130	4	X			
5	EMW-05		WT-6	G	11/3/23	1143	4	X			
12	Field Blank										
13											
14											
15											
16											

ADDITIONAL COMMENTS EDW-23Q4-Rev 0	RELINQUISHED BY / AFFILIATION <i>[Signature]</i>	DATE 11/3/23	TIME 1503
	ACCEPTED BY / AFFILIATION <i>[Signature]</i>	DATE 11/3/23	TIME 1503
	SAMPLER NAME AND SIGNATURE <i>[Signature]</i>	DATE SIGNED (MM/DD/YY) 11/03/23	TEMP IN °C 10.7
	PRINT Name of SAMPLER: Amanda Amberle	Received on Ice (Y/N) N	Temp in °C 10.7
	SIGNATURE of SAMPLER: <i>[Signature]</i>	Sealed Cooler (Y/N) N	Samples Intact (Y/N) Y

8400808

Section A
Required Client Information:
Company: Vistra Corp-Edwards
Address: 7800 Cicco Lane
Peoria, IL 61607
Email To: Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911 Fax:
Requested Due Date/TAT: 10 day

Section B
Required Project Information:
Report To: Brian Voelker
Copy To: Sam Davies-samantha.davies@vistracorp.com
Mark Davis-Mark.Davis1@vistracorp.com
Purchase Order No.:
Project Name:
Project Number: 2285

Section C
Invoice Information:
Attention: Mark Davis
Company Name: Vistra Corp-Edwards
Address: see Section A
Quote Reference:
Project Manager:
Profile #:

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	MATRIX CODE (see yield codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		# OF CONTAINERS	Preservatives Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	Requested Analysis Filtered (Y/N)	Project No./ Lab I.D.
					DATE	TIME				
1	AW-19									
2	AW-20									
3	AW-21									
4	AW-23									
5	EMW-05									
12	Field Blank									
13	AW-01 Dup		WT6	11/6/23	1440		4	X		
14	Equipment Blank 1		WT6	11/6/23	1645		4	X		
15										
16										

ADDITIONAL COMMENTS
EDW-23Q4-Rev 0

RELINQUISHED BY / AFFILIATION: [Signature] DATE: 11/6/23 TIME: 1709

ACCEPTED BY / AFFILIATION: [Signature] DATE: 11/6/23 TIME: 1710

Temp in °C: 5.1 Received on: 7 Custody Sealed Cooler (Y/N): 7 Samples Intact (Y/N): Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Sam Davies
SIGNATURE of SAMPLER: [Signature]
DATE Signed (MM/DD/YYYY): 11/06/23

**ATTACHMENT C
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND
QUARTER 4, 2023**

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
AP07S	PMP	E003	Antimony, total	mg/L	02/10/21 - 11/03/23	12	100	All ND - Last	0.003	0.003
AP07S	PMP	E003	Arsenic, total	mg/L	02/10/21 - 11/03/23	12	83	CI around median	0.001	0.0300
AP07S	PMP	E003	Barium, total	mg/L	02/10/21 - 11/03/23	12	0	CI around mean	0.0726	2.07
AP07S	PMP	E003	Beryllium, total	mg/L	02/10/21 - 11/03/23	12	100	All ND - Last	0.001	0.00190
AP07S	PMP	E003	Boron, total	mg/L	02/10/21 - 11/03/23	12	0	CB around linear reg	5.82	0.535
AP07S	PMP	E003	Cadmium, total	mg/L	02/10/21 - 11/03/23	12	83	CI around median	0.001	0.00100
AP07S	PMP	E003	Chloride, total	mg/L	02/10/21 - 11/03/23	12	0	CI around geomean	75.6	56.0
AP07S	PMP	E003	Chromium, total	mg/L	02/10/21 - 11/03/23	12	67	CI around median	0.004	0.0480
AP07S	PMP	E003	Cobalt, total	mg/L	02/10/21 - 11/03/23	12	0	CI around mean	0.00238	0.0280
AP07S	PMP	E003	Fluoride, total	mg/L	02/10/21 - 11/03/23	12	75	CB around T-S line	-1.21	0.396
AP07S	PMP	E003	Lead, total	mg/L	02/10/21 - 11/03/23	12	58	CI around median	0.001	0.0330
AP07S	PMP	E003	Lithium, total	mg/L	02/10/21 - 11/03/23	12	100	All ND - Last	0.02	0.0710
AP07S	PMP	E003	Mercury, total	mg/L	02/10/21 - 11/03/23	12	92	CI around median	0.0002	0.0002
AP07S	PMP	E003	Molybdenum, total	mg/L	02/10/21 - 11/03/23	12	42	CI around median	0.001	0.00620
AP07S	PMP	E003	pH (field)	SU	02/10/21 - 11/03/23	12	0	CI around mean	6.5/7.0	6.3/7.1
AP07S	PMP	E003	Radium 226 + Radium 228, total	pCi/L	02/10/21 - 11/03/23	12	0	CI around mean	0.585	9.60
AP07S	PMP	E003	Selenium, total	mg/L	02/10/21 - 11/03/23	12	100	All ND - Last	0.001	0.00320
AP07S	PMP	E003	Sulfate, total	mg/L	02/10/21 - 11/03/23	12	0	CI around median	160	6.48
AP07S	PMP	E003	Thallium, total	mg/L	02/10/21 - 11/03/23	12	100	All ND - Last	0.001	0.001
AP07S	PMP	E003	Total Dissolved Solids	mg/L	02/10/21 - 11/03/23	12	0	CI around mean	771	1,050
AW-01	PMP	E003	Antimony, total	mg/L	11/18/22 - 11/06/23	7	100	All ND - Last	0.003	0.003
AW-01	PMP	E003	Arsenic, total	mg/L	11/18/22 - 11/06/23	7	0	CI around mean	0.00187	0.0300
AW-01	PMP	E003	Barium, total	mg/L	11/18/22 - 11/06/23	7	0	CI around mean	0.109	2.07
AW-01	PMP	E003	Beryllium, total	mg/L	11/18/22 - 11/06/23	7	100	All ND - Last	0.001	0.00190
AW-01	PMP	E003	Boron, total	mg/L	11/18/22 - 11/06/23	7	0	CI around median	0.072	0.535
AW-01	PMP	E003	Cadmium, total	mg/L	11/18/22 - 11/06/23	7	100	All ND - Last	0.001	0.00100
AW-01	PMP	E003	Chloride, total	mg/L	11/18/22 - 11/06/23	7	0	CI around median	10	56.0

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
AW-01	PMP	E003	Chromium, total	mg/L	11/18/22 - 11/06/23	7	71	CI around median	0.004	0.0480
AW-01	PMP	E003	Cobalt, total	mg/L	11/18/22 - 11/06/23	7	0	CI around mean	0.00296	0.0280
AW-01	PMP	E003	Fluoride, total	mg/L	11/18/22 - 11/06/23	7	57	CI around median	0.25	0.396
AW-01	PMP	E003	Lead, total	mg/L	11/18/22 - 11/06/23	7	71	CI around median	0.001	0.0330
AW-01	PMP	E003	Lithium, total	mg/L	11/18/22 - 11/06/23	7	100	All ND - Last	0.02	0.0710
AW-01	PMP	E003	Mercury, total	mg/L	11/18/22 - 11/06/23	7	100	All ND - Last	0.0002	0.0002
AW-01	PMP	E003	Molybdenum, total	mg/L	11/18/22 - 11/06/23	7	0	CI around mean	0.0024	0.00620
AW-01	PMP	E003	pH (field)	SU	11/18/22 - 11/06/23	7	0	CI around mean	6.6/7.1	6.3/7.1
AW-01	PMP	E003	Radium 226 + Radium 228, total	pCi/L	11/18/22 - 11/06/23	7	0	CI around mean	-0.579	9.60
AW-01	PMP	E003	Selenium, total	mg/L	11/18/22 - 11/06/23	7	86	CI around median	0.001	0.00320
AW-01	PMP	E003	Sulfate, total	mg/L	11/18/22 - 11/06/23	7	0	CI around median	41	6.48
AW-01	PMP	E003	Thallium, total	mg/L	11/18/22 - 11/06/23	7	100	All ND - Last	0.001	0.001
AW-01	PMP	E003	Total Dissolved Solids	mg/L	11/18/22 - 11/06/23	7	0	CI around geomean	730	1,050
AW-05	UA	E003	Antimony, total	mg/L	11/09/15 - 11/06/23	16	94	Most recent sample	0.003	0.003
AW-05	UA	E003	Arsenic, total	mg/L	11/09/15 - 11/06/23	16	0	CI around geomean	0.00384	0.0300
AW-05	UA	E003	Barium, total	mg/L	11/09/15 - 11/06/23	16	0	CI around geomean	0.139	2.07
AW-05	UA	E003	Beryllium, total	mg/L	11/09/15 - 11/06/23	15	87	CI around median	0.001	0.00190
AW-05	UA	E003	Boron, total	mg/L	11/09/15 - 11/06/23	17	0	CB around linear reg	2.9	0.535
AW-05	UA	E003	Cadmium, total	mg/L	11/09/15 - 11/06/23	16	88	CI around median	0.001	0.00100
AW-05	UA	E003	Chloride, total	mg/L	11/09/15 - 11/06/23	17	0	CB around linear reg	-148	56.0
AW-05	UA	E003	Chromium, total	mg/L	11/09/15 - 11/06/23	16	31	CI around geomean	0.00561	0.0480
AW-05	UA	E003	Cobalt, total	mg/L	11/09/15 - 11/06/23	16	19	CI around geomean	0.00345	0.0280
AW-05	UA	E003	Fluoride, total	mg/L	11/09/15 - 11/06/23	17	53	CI around median	0.25	0.396
AW-05	UA	E003	Lead, total	mg/L	11/09/15 - 11/06/23	15	33	CI around geomean	0.00168	0.0330
AW-05	UA	E003	Lithium, total	mg/L	11/09/15 - 11/06/23	16	31	CI around geomean	0.0208	0.0710
AW-05	UA	E003	Mercury, total	mg/L	11/09/15 - 11/06/23	16	94	CI around median	0.0002	0.0002
AW-05	UA	E003	Molybdenum, total	mg/L	11/09/15 - 11/06/23	16	0	CI around mean	0.00207	0.00620

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
AW-05	UA	E003	pH (field)	SU	11/09/15 - 11/06/23	17	0	CI around mean	6.9/7.1	6.3/7.1
AW-05	UA	E003	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 11/06/23	16	0	CI around mean	0.65	9.60
AW-05	UA	E003	Selenium, total	mg/L	11/09/15 - 11/06/23	16	50	CI around median	0.001	0.00320
AW-05	UA	E003	Sulfate, total	mg/L	11/09/15 - 11/06/23	17	0	CI around median	270	6.48
AW-05	UA	E003	Thallium, total	mg/L	11/09/15 - 11/06/23	15	100	All ND - Last	0.001	0.001
AW-05	UA	E003	Total Dissolved Solids	mg/L	11/09/15 - 11/06/23	17	0	CI around mean	1,030	1,050
AW-06	UA	E003	Antimony, total	mg/L	11/10/15 - 11/06/23	17	100	All ND - Last	0.003	0.003
AW-06	UA	E003	Arsenic, total	mg/L	11/10/15 - 11/06/23	22	0	CI around geomean	0.00301	0.0300
AW-06	UA	E003	Barium, total	mg/L	11/10/15 - 11/06/23	22	0	CI around median	0.18	2.07
AW-06	UA	E003	Beryllium, total	mg/L	11/10/15 - 11/06/23	22	86	CI around median	0.001	0.00190
AW-06	UA	E003	Boron, total	mg/L	11/10/15 - 11/06/23	23	0	CB around linear reg	0.0576	0.535
AW-06	UA	E003	Cadmium, total	mg/L	11/10/15 - 11/06/23	17	100	All ND - Last	0.001	0.00100
AW-06	UA	E003	Chloride, total	mg/L	11/10/15 - 11/06/23	23	0	CB around T-S line	6.7	56.0
AW-06	UA	E003	Chromium, total	mg/L	11/10/15 - 11/06/23	22	54	CI around median	0.004	0.0480
AW-06	UA	E003	Cobalt, total	mg/L	11/10/15 - 11/06/23	22	59	CI around median	0.002	0.0280
AW-06	UA	E003	Fluoride, total	mg/L	11/10/15 - 11/06/23	23	9	CB around T-S line	0.201	0.396
AW-06	UA	E003	Lead, total	mg/L	11/10/15 - 11/06/23	22	36	CI around median	0.001	0.0330
AW-06	UA	E003	Lithium, total	mg/L	11/10/15 - 11/06/23	22	46	CI around geomean	0.0129	0.0710
AW-06	UA	E003	Mercury, total	mg/L	11/10/15 - 11/06/23	17	94	CI around median	0.0002	0.0002
AW-06	UA	E003	Molybdenum, total	mg/L	11/10/15 - 11/06/23	22	0	CI around mean	0.0048	0.00620
AW-06	UA	E003	pH (field)	SU	11/10/15 - 11/06/23	23	0	CI around median	7.1/7.3	6.3/7.1
AW-06	UA	E003	Radium 226 + Radium 228, total	pCi/L	11/10/15 - 11/06/23	22	0	CI around mean	0.684	9.60
AW-06	UA	E003	Selenium, total	mg/L	11/10/15 - 11/06/23	22	73	CI around median	0.001	0.00320
AW-06	UA	E003	Sulfate, total	mg/L	11/10/15 - 11/06/23	23	0	CB around linear reg	17.6	6.48
AW-06	UA	E003	Thallium, total	mg/L	11/10/15 - 11/06/23	17	100	All ND - Last	0.001	0.001
AW-06	UA	E003	Total Dissolved Solids	mg/L	11/10/15 - 11/06/23	23	0	CI around mean	510	1,050
AW-09	UA	E003	Antimony, total	mg/L	11/10/15 - 11/06/23	17	100	All ND - Last	0.003	0.003

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
AW-09	UA	E003	Arsenic, total	mg/L	11/10/15 - 11/06/23	22	14	CI around mean	0.0107	0.0300
AW-09	UA	E003	Barium, total	mg/L	11/10/15 - 11/06/23	22	0	CI around geomean	0.284	2.07
AW-09	UA	E003	Beryllium, total	mg/L	11/10/15 - 11/06/23	22	82	CB around T-S line	-0.000407	0.00190
AW-09	UA	E003	Boron, total	mg/L	11/10/15 - 11/06/23	23	0	CB around linear reg	-0.12	0.535
AW-09	UA	E003	Cadmium, total	mg/L	11/10/15 - 11/06/23	17	88	CI around median	0.001	0.00100
AW-09	UA	E003	Chloride, total	mg/L	11/10/15 - 11/06/23	23	0	CI around median	27	56.0
AW-09	UA	E003	Chromium, total	mg/L	11/10/15 - 11/06/23	22	54	CB around T-S line	-0.0517	0.0480
AW-09	UA	E003	Cobalt, total	mg/L	11/10/15 - 11/06/23	22	4	CB around T-S line	-0.0282	0.0280
AW-09	UA	E003	Fluoride, total	mg/L	11/10/15 - 11/06/23	23	61	CB around T-S line	0.181	0.396
AW-09	UA	E003	Lead, total	mg/L	11/10/15 - 11/06/23	22	41	CI around median	0.001	0.0330
AW-09	UA	E003	Lithium, total	mg/L	11/10/15 - 11/06/23	22	32	CB around T-S line	-0.0543	0.0710
AW-09	UA	E003	Mercury, total	mg/L	11/10/15 - 11/06/23	17	94	CI around median	0.0002	0.0002
AW-09	UA	E003	Molybdenum, total	mg/L	11/10/15 - 11/06/23	22	0	CI around mean	0.0141	0.00620
AW-09	UA	E003	pH (field)	SU	11/10/15 - 11/06/23	23	0	CB around linear reg	6.9/7.2	6.3/7.1
AW-09	UA	E003	Radium 226 + Radium 228, total	pCi/L	11/10/15 - 11/06/23	22	0	CI around median	0.729	9.60
AW-09	UA	E003	Selenium, total	mg/L	11/10/15 - 11/06/23	22	64	CB around T-S line	-0.00174	0.00320
AW-09	UA	E003	Sulfate, total	mg/L	11/10/15 - 11/06/23	23	52	CB around T-S line	-23.8	6.48
AW-09	UA	E003	Thallium, total	mg/L	11/10/15 - 11/06/23	17	94	CI around median	0.001	0.001
AW-09	UA	E003	Total Dissolved Solids	mg/L	11/10/15 - 11/06/23	23	0	CB around T-S line	748	1,050
AW-10	UA	E003	Antimony, total	mg/L	11/09/15 - 11/06/23	18	100	All ND - Last	0.003	0.003
AW-10	UA	E003	Arsenic, total	mg/L	11/09/15 - 11/06/23	23	0	CI around median	0.0099	0.0300
AW-10	UA	E003	Barium, total	mg/L	11/09/15 - 11/06/23	23	0	CI around median	0.98	2.07
AW-10	UA	E003	Beryllium, total	mg/L	11/09/15 - 11/06/23	23	74	CI around median	0.001	0.00190
AW-10	UA	E003	Boron, total	mg/L	11/09/15 - 11/06/23	24	0	CI around mean	0.462	0.535
AW-10	UA	E003	Cadmium, total	mg/L	11/09/15 - 11/06/23	18	94	CI around median	0.001	0.00100
AW-10	UA	E003	Chloride, total	mg/L	11/09/15 - 11/06/23	24	0	CI around geomean	87	56.0
AW-10	UA	E003	Chromium, total	mg/L	11/09/15 - 11/06/23	23	35	CI around median	0.004	0.0480

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
AW-10	UA	E003	Cobalt, total	mg/L	11/09/15 - 11/06/23	23	4	CI around geomean	0.00376	0.0280
AW-10	UA	E003	Fluoride, total	mg/L	11/09/15 - 11/06/23	24	96	CI around median	0.25	0.396
AW-10	UA	E003	Lead, total	mg/L	11/09/15 - 11/06/23	23	13	CI around geomean	0.00199	0.0330
AW-10	UA	E003	Lithium, total	mg/L	11/09/15 - 11/06/23	23	0	CB around T-S line	-0.0149	0.0710
AW-10	UA	E003	Mercury, total	mg/L	11/09/15 - 11/06/23	18	94	CI around median	0.0002	0.0002
AW-10	UA	E003	Molybdenum, total	mg/L	11/09/15 - 11/06/23	23	26	CB around T-S line	-0.000377	0.00620
AW-10	UA	E003	pH (field)	SU	11/09/15 - 11/06/23	25	0	CI around mean	6.9/7.1	6.3/7.1
AW-10	UA	E003	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 11/06/23	23	0	CI around mean	2.33	9.60
AW-10	UA	E003	Selenium, total	mg/L	11/09/15 - 11/06/23	23	61	CI around median	0.001	0.00320
AW-10	UA	E003	Sulfate, total	mg/L	11/09/15 - 11/06/23	24	79	CB around T-S line	0.764	6.48
AW-10	UA	E003	Thallium, total	mg/L	11/09/15 - 11/06/23	18	94	CI around median	0.001	0.001
AW-10	UA	E003	Total Dissolved Solids	mg/L	11/09/15 - 11/06/23	24	0	CI around median	1,100	1,050
AW-11	UA	E003	Antimony, total	mg/L	11/09/15 - 11/03/23	17	100	All ND - Last	0.003	0.003
AW-11	UA	E003	Arsenic, total	mg/L	11/09/15 - 11/03/23	22	0	CI around geomean	0.00905	0.0300
AW-11	UA	E003	Barium, total	mg/L	11/09/15 - 11/03/23	22	0	CI around geomean	0.869	2.07
AW-11	UA	E003	Beryllium, total	mg/L	11/09/15 - 11/03/23	22	77	CI around median	0.001	0.00190
AW-11	UA	E003	Boron, total	mg/L	11/09/15 - 11/03/23	23	0	CI around mean	0.221	0.535
AW-11	UA	E003	Cadmium, total	mg/L	11/09/15 - 11/03/23	17	82	CI around median	0.001	0.00100
AW-11	UA	E003	Chloride, total	mg/L	11/09/15 - 11/03/23	23	0	CI around mean	31.2	56.0
AW-11	UA	E003	Chromium, total	mg/L	11/09/15 - 11/03/23	22	50	CB around T-S line	-0.0209	0.0480
AW-11	UA	E003	Cobalt, total	mg/L	11/09/15 - 11/03/23	22	27	CB around T-S line	-0.00781	0.0280
AW-11	UA	E003	Fluoride, total	mg/L	11/09/15 - 11/03/23	23	87	CI around median	0.25	0.396
AW-11	UA	E003	Lead, total	mg/L	11/09/15 - 11/03/23	22	41	CB around T-S line	-0.0118	0.0330
AW-11	UA	E003	Lithium, total	mg/L	11/09/15 - 11/03/23	22	18	CB around T-S line	-0.0161	0.0710
AW-11	UA	E003	Mercury, total	mg/L	11/09/15 - 11/03/23	17	100	All ND - Last	0.0002	0.0002
AW-11	UA	E003	Molybdenum, total	mg/L	11/09/15 - 11/03/23	22	4	CB around linear reg	-0.00122	0.00620
AW-11	UA	E003	pH (field)	SU	11/09/15 - 11/03/23	23	0	CI around median	6.9/7.2	6.3/7.1

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
AW-11	UA	E003	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 11/03/23	22	0	CI around geomean	1.52	9.60
AW-11	UA	E003	Selenium, total	mg/L	11/09/15 - 11/03/23	22	68	CB around T-S line	-3.86e-05	0.00320
AW-11	UA	E003	Sulfate, total	mg/L	11/09/15 - 11/03/23	23	65	CB around T-S line	0.0465	6.48
AW-11	UA	E003	Thallium, total	mg/L	11/09/15 - 11/03/23	17	100	All ND - Last	0.001	0.001
AW-11	UA	E003	Total Dissolved Solids	mg/L	11/09/15 - 11/03/23	23	0	CB around T-S line	942	1,050
AW-14	UA	E003	Antimony, total	mg/L	02/11/21 - 11/03/23	11	91	CI around median	0.003	0.003
AW-14	UA	E003	Arsenic, total	mg/L	02/11/21 - 11/03/23	11	0	CI around mean	0.00634	0.0300
AW-14	UA	E003	Barium, total	mg/L	02/11/21 - 11/03/23	11	0	CB around linear reg	0.721	2.07
AW-14	UA	E003	Beryllium, total	mg/L	02/11/21 - 11/03/23	11	100	All ND - Last	0.001	0.00190
AW-14	UA	E003	Boron, total	mg/L	02/11/21 - 11/03/23	11	0	CI around geomean	0.171	0.535
AW-14	UA	E003	Cadmium, total	mg/L	02/11/21 - 11/03/23	11	100	All ND - Last	0.001	0.00100
AW-14	UA	E003	Chloride, total	mg/L	02/11/21 - 11/03/23	11	0	CI around geomean	23	56.0
AW-14	UA	E003	Chromium, total	mg/L	02/11/21 - 11/03/23	11	91	CI around median	0.004	0.0480
AW-14	UA	E003	Cobalt, total	mg/L	02/11/21 - 11/03/23	11	18	CB around linear reg	-0.00242	0.0280
AW-14	UA	E003	Fluoride, total	mg/L	02/11/21 - 11/03/23	11	82	CI around median	0.25	0.396
AW-14	UA	E003	Lead, total	mg/L	02/11/21 - 11/03/23	11	73	CI around median	0.001	0.0330
AW-14	UA	E003	Lithium, total	mg/L	02/11/21 - 11/03/23	11	54	CI around median	0.02	0.0710
AW-14	UA	E003	Mercury, total	mg/L	02/11/21 - 11/03/23	11	100	All ND - Last	0.0002	0.0002
AW-14	UA	E003	Molybdenum, total	mg/L	02/11/21 - 11/03/23	11	27	CI around geomean	0.00131	0.00620
AW-14	UA	E003	pH (field)	SU	02/11/21 - 11/03/23	11	0	CI around mean	6.8/7.0	6.3/7.1
AW-14	UA	E003	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 11/03/23	11	0	CI around mean	1.9	9.60
AW-14	UA	E003	Selenium, total	mg/L	02/11/21 - 11/03/23	11	91	CI around median	0.001	0.00320
AW-14	UA	E003	Sulfate, total	mg/L	02/11/21 - 11/03/23	11	18	CI around geomean	1.59	6.48
AW-14	UA	E003	Thallium, total	mg/L	02/11/21 - 11/03/23	11	100	All ND - Last	0.001	0.001
AW-14	UA	E003	Total Dissolved Solids	mg/L	02/11/21 - 11/03/23	11	0	CI around mean	911	1,050
AW-15	UA	E003	Antimony, total	mg/L	02/12/21 - 11/02/23	9	100	All ND - Last	0.003	0.003
AW-15	UA	E003	Arsenic, total	mg/L	02/12/21 - 11/02/23	9	0	CI around mean	0.00172	0.0300

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
AW-15	UA	E003	Barium, total	mg/L	02/12/21 - 11/02/23	9	0	CI around mean	1.63	2.07
AW-15	UA	E003	Beryllium, total	mg/L	02/12/21 - 11/02/23	9	100	All ND - Last	0.001	0.00190
AW-15	UA	E003	Boron, total	mg/L	02/12/21 - 11/02/23	9	0	CI around mean	0.336	0.535
AW-15	UA	E003	Cadmium, total	mg/L	02/12/21 - 11/02/23	9	100	All ND - Last	0.001	0.00100
AW-15	UA	E003	Chloride, total	mg/L	02/12/21 - 11/02/23	9	0	CB around linear reg	24.2	56.0
AW-15	UA	E003	Chromium, total	mg/L	02/12/21 - 11/02/23	9	100	All ND - Last	0.004	0.0480
AW-15	UA	E003	Cobalt, total	mg/L	02/12/21 - 11/02/23	9	89	CI around median	0.002	0.0280
AW-15	UA	E003	Fluoride, total	mg/L	02/12/21 - 11/02/23	9	78	CI around median	0.25	0.396
AW-15	UA	E003	Lead, total	mg/L	02/12/21 - 11/02/23	9	100	All ND - Last	0.001	0.0330
AW-15	UA	E003	Lithium, total	mg/L	02/12/21 - 11/02/23	9	0	CI around mean	0.0279	0.0710
AW-15	UA	E003	Mercury, total	mg/L	02/12/21 - 11/02/23	9	89	CI around median	0.0002	0.0002
AW-15	UA	E003	Molybdenum, total	mg/L	02/12/21 - 11/02/23	9	78	CI around median	0.001	0.00620
AW-15	UA	E003	pH (field)	SU	02/12/21 - 11/02/23	8	0	CI around mean	6.6/6.9	6.3/7.1
AW-15	UA	E003	Radium 226 + Radium 228, total	pCi/L	02/12/21 - 11/02/23	9	0	CI around mean	2.97	9.60
AW-15	UA	E003	Selenium, total	mg/L	02/12/21 - 11/02/23	9	100	All ND - Last	0.001	0.00320
AW-15	UA	E003	Sulfate, total	mg/L	02/12/21 - 11/02/23	9	89	Most recent sample	1	6.48
AW-15	UA	E003	Thallium, total	mg/L	02/12/21 - 11/02/23	9	100	All ND - Last	0.001	0.001
AW-15	UA	E003	Total Dissolved Solids	mg/L	02/12/21 - 11/17/23	9	0	CI around mean	891	1,050
AW-15S	PMP	E003	Antimony, total	mg/L	02/12/21 - 11/02/23	12	100	All ND - Last	0.003	0.003
AW-15S	PMP	E003	Arsenic, total	mg/L	02/12/21 - 11/02/23	12	58	CI around median	0.001	0.0300
AW-15S	PMP	E003	Barium, total	mg/L	02/12/21 - 11/02/23	12	0	CB around T-S line	-0.0761	2.07
AW-15S	PMP	E003	Beryllium, total	mg/L	02/12/21 - 11/02/23	12	92	CI around median	0.001	0.00190
AW-15S	PMP	E003	Boron, total	mg/L	02/12/21 - 11/02/23	12	0	CI around mean	5.51	0.535
AW-15S	PMP	E003	Cadmium, total	mg/L	02/12/21 - 11/02/23	12	100	All ND - Last	0.001	0.00100
AW-15S	PMP	E003	Chloride, total	mg/L	02/12/21 - 11/02/23	12	0	CB around linear reg	21.8	56.0
AW-15S	PMP	E003	Chromium, total	mg/L	02/12/21 - 11/02/23	12	92	CI around median	0.004	0.0480
AW-15S	PMP	E003	Cobalt, total	mg/L	02/12/21 - 11/02/23	12	92	CI around median	0.002	0.0280

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
AW-15S	PMP	E003	Fluoride, total	mg/L	02/12/21 - 11/02/23	12	33	CI around median	0.25	0.396
AW-15S	PMP	E003	Lead, total	mg/L	02/12/21 - 11/02/23	12	83	CI around median	0.001	0.0330
AW-15S	PMP	E003	Lithium, total	mg/L	02/12/21 - 11/02/23	12	83	CI around median	0.02	0.0710
AW-15S	PMP	E003	Mercury, total	mg/L	02/12/21 - 11/02/23	12	100	All ND - Last	0.0002	0.0002
AW-15S	PMP	E003	Molybdenum, total	mg/L	02/12/21 - 11/02/23	12	0	CB around linear reg	0.00218	0.00620
AW-15S	PMP	E003	pH (field)	SU	02/12/21 - 11/02/23	12	0	CI around mean	6.7/7.0	6.3/7.1
AW-15S	PMP	E003	Selenium, total	mg/L	02/12/21 - 11/02/23	12	42	CI around median	0.001	0.00320
AW-15S	PMP	E003	Sulfate, total	mg/L	02/12/21 - 11/02/23	12	0	CB around linear reg	510	6.48
AW-15S	PMP	E003	Thallium, total	mg/L	02/12/21 - 11/02/23	12	100	All ND - Last	0.001	0.001
AW-15S	PMP	E003	Total Dissolved Solids	mg/L	02/12/21 - 11/17/23	12	0	CI around mean	1,180	1,050
AW-16	UA	E003	Antimony, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.003	0.003
AW-16	UA	E003	Arsenic, total	mg/L	02/11/21 - 11/02/23	12	17	CI around mean	0.00119	0.0300
AW-16	UA	E003	Barium, total	mg/L	02/11/21 - 11/02/23	12	0	CI around mean	1.16	2.07
AW-16	UA	E003	Beryllium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.00190
AW-16	UA	E003	Boron, total	mg/L	02/11/21 - 11/02/23	12	0	CI around mean	0.458	0.535
AW-16	UA	E003	Cadmium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.00100
AW-16	UA	E003	Chloride, total	mg/L	02/11/21 - 11/02/23	12	0	CI around mean	49.4	56.0
AW-16	UA	E003	Chromium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.004	0.0480
AW-16	UA	E003	Cobalt, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.002	0.0280
AW-16	UA	E003	Fluoride, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.25	0.396
AW-16	UA	E003	Lead, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.0330
AW-16	UA	E003	Lithium, total	mg/L	02/11/21 - 11/02/23	12	0	CB around T-S line	0.00737	0.0710
AW-16	UA	E003	Mercury, total	mg/L	02/11/21 - 11/02/23	12	92	CI around median	0.0002	0.0002
AW-16	UA	E003	Molybdenum, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.00620
AW-16	UA	E003	pH (field)	SU	02/11/21 - 11/02/23	12	0	CI around mean	6.6/6.9	6.3/7.1
AW-16	UA	E003	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 11/02/23	12	0	CB around linear reg	1.74	9.60
AW-16	UA	E003	Selenium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.00320

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
AW-16	UA	E003	Sulfate, total	mg/L	02/11/21 - 11/02/23	12	92	CI around median	1	6.48
AW-16	UA	E003	Thallium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.001
AW-16	UA	E003	Total Dissolved Solids	mg/L	02/11/21 - 11/17/23	12	0	CI around mean	1,060	1,050
AW-17	UA	E003	Antimony, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.003	0.003
AW-17	UA	E003	Arsenic, total	mg/L	02/11/21 - 11/01/23	12	0	CB around linear reg	0.00223	0.0300
AW-17	UA	E003	Barium, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	1.03	2.07
AW-17	UA	E003	Beryllium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.00190
AW-17	UA	E003	Boron, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	0.413	0.535
AW-17	UA	E003	Cadmium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.00100
AW-17	UA	E003	Chloride, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	52.1	56.0
AW-17	UA	E003	Chromium, total	mg/L	02/11/21 - 11/01/23	12	67	CI around median	0.004	0.0480
AW-17	UA	E003	Cobalt, total	mg/L	02/11/21 - 11/01/23	12	0	CI around median	0.0022	0.0280
AW-17	UA	E003	Fluoride, total	mg/L	02/11/21 - 11/01/23	12	92	CI around median	0.25	0.396
AW-17	UA	E003	Lead, total	mg/L	02/11/21 - 11/01/23	12	67	CI around median	0.001	0.0330
AW-17	UA	E003	Lithium, total	mg/L	02/11/21 - 11/01/23	12	0	CB around linear reg	0.000638	0.0710
AW-17	UA	E003	Mercury, total	mg/L	02/11/21 - 11/01/23	12	92	CI around median	0.0002	0.0002
AW-17	UA	E003	Molybdenum, total	mg/L	02/11/21 - 11/01/23	12	42	CB around linear reg	-9.68e-05	0.00620
AW-17	UA	E003	pH (field)	SU	02/11/21 - 11/01/23	12	0	CI around median	6.6/7.0	6.3/7.1
AW-17	UA	E003	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 11/01/23	12	0	CI around mean	2.61	9.60
AW-17	UA	E003	Selenium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.00320
AW-17	UA	E003	Sulfate, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	1	6.48
AW-17	UA	E003	Thallium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.001
AW-17	UA	E003	Total Dissolved Solids	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	828	1,050
AW-18	UA	E003	Antimony, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.003	0.003
AW-18	UA	E003	Arsenic, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	0.0033	0.0300
AW-18	UA	E003	Barium, total	mg/L	02/11/21 - 11/01/23	12	0	CB around linear reg	1.1	2.07
AW-18	UA	E003	Beryllium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.00190

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
AW-18	UA	E003	Boron, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	0.623	0.535
AW-18	UA	E003	Cadmium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.00100
AW-18	UA	E003	Chloride, total	mg/L	02/11/21 - 11/01/23	12	0	CB around linear reg	79.5	56.0
AW-18	UA	E003	Chromium, total	mg/L	02/11/21 - 11/01/23	12	92	CI around median	0.004	0.0480
AW-18	UA	E003	Cobalt, total	mg/L	02/11/21 - 11/01/23	12	75	CI around median	0.002	0.0280
AW-18	UA	E003	Fluoride, total	mg/L	02/11/21 - 11/01/23	12	50	CI around median	0.25	0.396
AW-18	UA	E003	Lead, total	mg/L	02/11/21 - 11/01/23	12	75	CI around median	0.001	0.0330
AW-18	UA	E003	Lithium, total	mg/L	02/11/21 - 11/01/23	12	0	CB around linear reg	-0.0246	0.0710
AW-18	UA	E003	Mercury, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.0002	0.0002
AW-18	UA	E003	Molybdenum, total	mg/L	02/11/21 - 11/01/23	12	0	CB around linear reg	-0.0127	0.00620
AW-18	UA	E003	pH (field)	SU	02/11/21 - 11/01/23	12	0	CI around mean	6.7/7.0	6.3/7.1
AW-18	UA	E003	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 11/01/23	12	0	CI around mean	2.27	9.60
AW-18	UA	E003	Selenium, total	mg/L	02/11/21 - 11/01/23	12	92	CI around median	0.001	0.00320
AW-18	UA	E003	Sulfate, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	4.52	6.48
AW-18	UA	E003	Thallium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.001
AW-18	UA	E003	Total Dissolved Solids	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	781	1,050
AW-19	UA	E003	Antimony, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.003	0.003
AW-19	UA	E003	Arsenic, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	0.0111	0.0300
AW-19	UA	E003	Barium, total	mg/L	02/11/21 - 11/01/23	12	0	CI around median	0.18	2.07
AW-19	UA	E003	Beryllium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.00190
AW-19	UA	E003	Boron, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	2.52	0.535
AW-19	UA	E003	Cadmium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.00100
AW-19	UA	E003	Chloride, total	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	76.8	56.0
AW-19	UA	E003	Chromium, total	mg/L	02/11/21 - 11/01/23	12	75	CI around median	0.004	0.0480
AW-19	UA	E003	Cobalt, total	mg/L	02/11/21 - 11/01/23	12	75	CI around median	0.002	0.0280
AW-19	UA	E003	Fluoride, total	mg/L	02/11/21 - 11/01/23	12	8	CB around linear reg	0.116	0.396
AW-19	UA	E003	Lead, total	mg/L	02/11/21 - 11/01/23	12	50	CI around median	0.001	0.0330

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
AW-19	UA	E003	Lithium, total	mg/L	02/11/21 - 11/01/23	12	67	CI around median	0.02	0.0710
AW-19	UA	E003	Mercury, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.0002	0.0002
AW-19	UA	E003	Molybdenum, total	mg/L	02/11/21 - 11/01/23	12	0	CI around median	0.0034	0.00620
AW-19	UA	E003	pH (field)	SU	02/11/21 - 11/01/23	12	0	CI around mean	6.7/7.1	6.3/7.1
AW-19	UA	E003	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 11/01/23	12	0	CI around mean	0.421	9.60
AW-19	UA	E003	Selenium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.00320
AW-19	UA	E003	Sulfate, total	mg/L	02/11/21 - 11/01/23	12	0	CB around linear reg	51	6.48
AW-19	UA	E003	Thallium, total	mg/L	02/11/21 - 11/01/23	12	100	All ND - Last	0.001	0.001
AW-19	UA	E003	Total Dissolved Solids	mg/L	02/11/21 - 11/01/23	12	0	CI around mean	553	1,050
AW-21	UA	E003	Antimony, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.003	0.003
AW-21	UA	E003	Arsenic, total	mg/L	02/11/21 - 11/02/23	12	25	CI around mean	0.00101	0.0300
AW-21	UA	E003	Barium, total	mg/L	02/11/21 - 11/02/23	12	0	CB around linear reg	0.0413	2.07
AW-21	UA	E003	Beryllium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.00190
AW-21	UA	E003	Boron, total	mg/L	02/11/21 - 11/02/23	12	0	CI around median	11	0.535
AW-21	UA	E003	Cadmium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.00100
AW-21	UA	E003	Chloride, total	mg/L	02/11/21 - 11/02/23	12	0	CI around median	83	56.0
AW-21	UA	E003	Chromium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.004	0.0480
AW-21	UA	E003	Cobalt, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.002	0.0280
AW-21	UA	E003	Fluoride, total	mg/L	02/11/21 - 11/02/23	12	0	CB around linear reg	0.155	0.396
AW-21	UA	E003	Lead, total	mg/L	02/11/21 - 11/02/23	12	92	CI around median	0.001	0.0330
AW-21	UA	E003	Lithium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.02	0.0710
AW-21	UA	E003	Mercury, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.0002	0.0002
AW-21	UA	E003	Molybdenum, total	mg/L	02/11/21 - 11/02/23	12	0	CI around mean	0.0169	0.00620
AW-21	UA	E003	pH (field)	SU	02/11/21 - 11/02/23	12	0	CI around mean	6.9/7.5	6.3/7.1
AW-21	UA	E003	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 11/02/23	12	0	CI around mean	0.428	9.60
AW-21	UA	E003	Selenium, total	mg/L	02/11/21 - 11/02/23	12	75	CI around median	0.001	0.00320
AW-21	UA	E003	Sulfate, total	mg/L	02/11/21 - 11/02/23	12	0	CI around median	230	6.48

**ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 4, 2023**

845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
AW-21	UA	E003	Thallium, total	mg/L	02/11/21 - 11/02/23	12	100	All ND - Last	0.001	0.001
AW-21	UA	E003	Total Dissolved Solids	mg/L	02/11/21 - 11/17/23	12	0	CI around mean	650	1,050

Notes:

Lower Confidence Limit (LCL) or Upper Confidence Limit (UCL) exceeded the statistical background value

HSU = hydrostratigraphic unit:

PMP = Potential Migration Pathway

UA = Uppermost Aquifer

mg/L = milligrams per liter

ND = non-detect

pCi/L = picocuries per liter

SU = standard units

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

Statistical Calculation = method used to calculate the statistical result:

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

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

CB around linear reg = Confidence band around linear regression

CI around geomean = Confidence interval around the geometric mean

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

Most recent sample = Result for the most recently collected sample used due to insufficient data

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

For pH, the values presented are the lower / upper limits of the background determination

**ATTACHMENT D
SUPPLEMENTAL GROUNDWATER ELEVATION DATA
QUARTER 4, 2023**

ATTACHMENT D.
SUPPLEMENTAL GROUNDWATER ELEVATION DATA - QUARTER 4, 2023

845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Well Type	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
APW-01	Supplemental	10/27/2023	5.73	435.34
AW-20	Supplemental	10/27/2023	17.10	444.38
AW-23	Supplemental	10/27/2023	5.46	432.11
EMW-05	Supplemental	10/27/2023	21.67	436.27

Notes:

BMP = below measuring point
NAVD88 = North American Vertical Datum of 1988

**ATTACHMENT E
SUPPLEMENTAL COMPARISON OF STATISTICAL RESULTS
TO BACKGROUND
QUARTER 4, 2023**

**ATTACHMENT E.
SUPPLEMENTAL COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 4, 2023**

845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
APW-01	UA	E003	Antimony, total	mg/L	06/17/21 - 11/06/23	6	100	All ND - Last	0.003	0.003
APW-01	UA	E003	Arsenic, total	mg/L	06/17/21 - 11/06/23	6	0	CI around mean	0.00521	0.0300
APW-01	UA	E003	Barium, total	mg/L	06/17/21 - 11/06/23	6	0	CI around mean	0.0443	2.07
APW-01	UA	E003	Beryllium, total	mg/L	06/17/21 - 11/06/23	6	100	All ND - Last	0.001	0.00190
APW-01	UA	E003	Boron, total	mg/L	06/17/21 - 11/06/23	6	0	CI around mean	0.651	0.535
APW-01	UA	E003	Cadmium, total	mg/L	06/17/21 - 11/06/23	6	83	CI around median (Last Sample, n<7)	0.001	0.00100
APW-01	UA	E003	Chloride, total	mg/L	06/17/21 - 11/06/23	6	0	CI around mean	102	56.0
APW-01	UA	E003	Chromium, total	mg/L	06/17/21 - 11/06/23	6	33	CI around mean	0.000859	0.0480
APW-01	UA	E003	Cobalt, total	mg/L	06/17/21 - 11/06/23	6	33	CI around mean	7.52e-05	0.0280
APW-01	UA	E003	Fluoride, total	mg/L	06/17/21 - 11/06/23	6	67	CI around median (Last Sample, n<7)	0.25	0.396
APW-01	UA	E003	Lead, total	mg/L	06/17/21 - 11/06/23	6	33	CI around mean	-0.00198	0.0330
APW-01	UA	E003	Lithium, total	mg/L	06/17/21 - 11/06/23	6	67	CI around median (Last Sample, n<7)	0.02	0.0710
APW-01	UA	E003	Mercury, total	mg/L	06/17/21 - 11/06/23	6	100	All ND - Last	0.0002	0.0002
APW-01	UA	E003	Molybdenum, total	mg/L	06/17/21 - 11/06/23	6	0	CI around mean	0.0012	0.00620
APW-01	UA	E003	pH (field)	SU	06/17/21 - 11/06/23	6	0	CI around mean	6.6/7.1	6.3/7.1
APW-01	UA	E003	Radium 226 + Radium 228, total	pCi/L	06/17/21 - 11/06/23	5	0	CI around mean	-0.066	9.60
APW-01	UA	E003	Selenium, total	mg/L	06/17/21 - 11/06/23	6	67	CI around median (Last Sample, n<7)	0.001	0.00320
APW-01	UA	E003	Sulfate, total	mg/L	06/17/21 - 11/06/23	6	0	CI around mean	282	6.48
APW-01	UA	E003	Thallium, total	mg/L	06/17/21 - 11/06/23	6	100	All ND - Last	0.001	0.001
APW-01	UA	E003	Total Dissolved Solids	mg/L	06/17/21 - 11/06/23	6	0	CI around mean	832	1,050
AW-20	UA	E003	Antimony, total	mg/L	02/11/21 - 11/01/23	8	100	All ND - Last	0.003	0.003
AW-20	UA	E003	Arsenic, total	mg/L	02/11/21 - 11/01/23	8	0	CI around mean	0.0112	0.0300
AW-20	UA	E003	Barium, total	mg/L	02/11/21 - 11/01/23	8	0	CI around mean	0.13	2.07
AW-20	UA	E003	Beryllium, total	mg/L	02/11/21 - 11/01/23	8	100	All ND - Last	0.001	0.00190
AW-20	UA	E003	Boron, total	mg/L	02/11/21 - 11/01/23	8	0	CI around mean	2.04	0.535
AW-20	UA	E003	Cadmium, total	mg/L	02/11/21 - 11/01/23	8	100	All ND - Last	0.001	0.00100
AW-20	UA	E003	Chloride, total	mg/L	02/11/21 - 11/01/23	8	0	CI around mean	86	56.0

**ATTACHMENT E.
SUPPLEMENTAL COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 4, 2023**

845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
AW-20	UA	E003	Chromium, total	mg/L	02/11/21 - 11/01/23	8	88	CI around median	0.004	0.0480
AW-20	UA	E003	Cobalt, total	mg/L	02/11/21 - 11/01/23	8	62	CI around median	0.002	0.0280
AW-20	UA	E003	Fluoride, total	mg/L	02/11/21 - 11/01/23	8	25	CI around mean	0.25	0.396
AW-20	UA	E003	Lead, total	mg/L	02/11/21 - 11/01/23	8	62	CI around median	0.001	0.0330
AW-20	UA	E003	Lithium, total	mg/L	02/11/21 - 11/01/23	8	75	CI around median	0.02	0.0710
AW-20	UA	E003	Mercury, total	mg/L	02/11/21 - 11/01/23	8	100	All ND - Last	0.0002	0.0002
AW-20	UA	E003	Molybdenum, total	mg/L	02/11/21 - 11/01/23	8	0	CI around mean	0.0023	0.00620
AW-20	UA	E003	pH (field)	SU	02/11/21 - 11/01/23	8	0	CI around mean	6.5/7.1	6.3/7.1
AW-20	UA	E003	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 11/01/23	7	0	CI around mean	0.381	9.60
AW-20	UA	E003	Selenium, total	mg/L	02/11/21 - 11/01/23	8	100	All ND - Last	0.001	0.00320
AW-20	UA	E003	Sulfate, total	mg/L	02/11/21 - 11/01/23	8	0	CI around mean	40.2	6.48
AW-20	UA	E003	Thallium, total	mg/L	02/11/21 - 11/01/23	8	100	All ND - Last	0.001	0.001
AW-20	UA	E003	Total Dissolved Solids	mg/L	02/11/21 - 11/01/23	8	0	CI around mean	746	1,050
AW-23	UA	E003	Antimony, total	mg/L	11/21/22 - 11/03/23	6	100	All ND - Last	0.003	0.003
AW-23	UA	E003	Arsenic, total	mg/L	11/21/22 - 11/03/23	6	67	CI around median (Last Sample, n<7)	0.0025	0.0300
AW-23	UA	E003	Barium, total	mg/L	11/21/22 - 11/03/23	6	0	CI around median (Last Sample, n<7)	0.31	2.07
AW-23	UA	E003	Beryllium, total	mg/L	11/21/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.0011	0.00190
AW-23	UA	E003	Boron, total	mg/L	11/21/22 - 11/03/23	6	0	CI around mean	0.476	0.535
AW-23	UA	E003	Cadmium, total	mg/L	11/21/22 - 11/03/23	6	100	All ND - Last	0.001	0.00100
AW-23	UA	E003	Chloride, total	mg/L	11/21/22 - 11/03/23	6	0	CI around mean	36.1	56.0
AW-23	UA	E003	Chromium, total	mg/L	11/21/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.028	0.0480
AW-23	UA	E003	Cobalt, total	mg/L	11/21/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.019	0.0280
AW-23	UA	E003	Fluoride, total	mg/L	11/21/22 - 11/03/23	6	50	CI around median (Last Sample, n<7)	0.25	0.396
AW-23	UA	E003	Lead, total	mg/L	11/21/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.0096	0.0330
AW-23	UA	E003	Lithium, total	mg/L	11/21/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.038	0.0710
AW-23	UA	E003	Mercury, total	mg/L	11/21/22 - 11/03/23	6	100	All ND - Last	0.0002	0.0002
AW-23	UA	E003	Molybdenum, total	mg/L	11/21/22 - 11/03/23	6	67	CI around median (Last Sample, n<7)	0.001	0.00620

ATTACHMENT E.
SUPPLEMENTAL COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
AW-23	UA	E003	pH (field)	SU	11/21/22 - 11/03/23	6	0	CI around mean	6.7/7.0	6.3/7.1
AW-23	UA	E003	Radium 226 + Radium 228, total	pCi/L	11/21/22 - 11/03/23	5	0	CI around mean	-0.303	9.60
AW-23	UA	E003	Selenium, total	mg/L	11/21/22 - 11/03/23	6	100	All ND - Last	0.001	0.00320
AW-23	UA	E003	Sulfate, total	mg/L	11/21/22 - 11/03/23	6	0	CI around mean	177	6.48
AW-23	UA	E003	Thallium, total	mg/L	11/21/22 - 11/03/23	6	100	All ND - Last	0.001	0.001
AW-23	UA	E003	Total Dissolved Solids	mg/L	11/21/22 - 11/03/23	6	0	CI around mean	704	1,050
EMW-05	UA	E003	Antimony, total	mg/L	11/18/22 - 11/03/23	6	100	All ND - Last	0.003	0.003
EMW-05	UA	E003	Arsenic, total	mg/L	11/18/22 - 11/03/23	6	33	CI around median (Last Sample, n<7)	0.001	0.0300
EMW-05	UA	E003	Barium, total	mg/L	11/18/22 - 11/03/23	6	0	CI around median (Last Sample, n<7)	0.053	2.07
EMW-05	UA	E003	Beryllium, total	mg/L	11/18/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.001	0.00190
EMW-05	UA	E003	Boron, total	mg/L	11/18/22 - 11/03/23	6	0	CI around mean	0.295	0.535
EMW-05	UA	E003	Cadmium, total	mg/L	11/18/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.001	0.00100
EMW-05	UA	E003	Chloride, total	mg/L	11/18/22 - 11/03/23	6	0	CI around mean	16.7	56.0
EMW-05	UA	E003	Chromium, total	mg/L	11/18/22 - 11/03/23	6	67	CI around median (Last Sample, n<7)	0.004	0.0480
EMW-05	UA	E003	Cobalt, total	mg/L	11/18/22 - 11/03/23	6	50	CI around median (Last Sample, n<7)	0.002	0.0280
EMW-05	UA	E003	Fluoride, total	mg/L	11/18/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.25	0.396
EMW-05	UA	E003	Lead, total	mg/L	11/18/22 - 11/03/23	6	67	CI around median (Last Sample, n<7)	0.001	0.0330
EMW-05	UA	E003	Lithium, total	mg/L	11/18/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.02	0.0710
EMW-05	UA	E003	Mercury, total	mg/L	11/18/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.0002	0.0002
EMW-05	UA	E003	Molybdenum, total	mg/L	11/18/22 - 11/03/23	6	0	CI around mean	0.000531	0.00620
EMW-05	UA	E003	pH (field)	SU	12/15/22 - 11/03/23	5	0	CI around mean	6.4/7.3	6.3/7.1
EMW-05	UA	E003	Radium 226 + Radium 228, total	pCi/L	11/18/22 - 11/03/23	5	0	CI around mean	0.00842	9.60
EMW-05	UA	E003	Selenium, total	mg/L	11/18/22 - 11/03/23	6	83	CI around median (Last Sample, n<7)	0.001	0.00320
EMW-05	UA	E003	Sulfate, total	mg/L	11/18/22 - 11/03/23	6	0	CI around median (Last Sample, n<7)	130	6.48
EMW-05	UA	E003	Thallium, total	mg/L	11/18/22 - 11/03/23	6	100	All ND - Last	0.001	0.001
EMW-05	UA	E003	Total Dissolved Solids	mg/L	11/18/22 - 11/03/23	6	17	CI around median (Last Sample, n<7)	860	1,050

ATTACHMENT E.
SUPPLEMENTAL COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 4, 2023
845 QUARTERLY REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Notes:

Lower Confidence Limit (LCL) or Upper Confidence Limit (UCL) exceeded the statistical background value

HSU = hydrostratigraphic unit:

UA = Uppermost Aquifer

mg/L = milligrams per liter

ND = non-detect

pCi/L = picocuries per liter

SU = standard units

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

Statistical Calculation = method used to calculate the statistical result:

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

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

Statistical Result = calculated in accordance with the Statistical Analysis Plan using constituent concentrations observed at each monitoring well during all sampling events within the specified date range
For pH, the values presented are the lower / upper limits of the background determination