Luminant

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

September 12, 2023

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: Duck Creek Power Plant Gypsum Management Facility (GMF) Pond;**
**IEPA ID # W0578010001-04**

Dear Mr. LeCrone:

In accordance with Title 35 of the Illinois Administrative Code (35 I.A.C.) Section (§) 845.610(b)(3)(D), Illinois Power Resources Generating, LLC (IPRG) is submitting groundwater monitoring data for the Quarter 2 2023 sampling event at the Duck Creek Power Plant Gypsum Management Facility (GMF) Pond, identified by Illinois Environmental Protection Agency (IEPA) ID No. W0578010001-04. 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 exceedances of the GWPS.

The date of this submittal is considered to be the date that exceedances of the GWPS 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 alternate 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,

Dianna Tickner

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

Enclosures

*Groundwater Monitoring Data and Detected Exceedances, Quarter 2 2023, GMF Pond, Duck Creek Power Plant, Canton, Illinois*

RAMBOLL

ENVIRONMENT
& HEALTH

# 35 I.A.C. § 845.610(B)(3)(D)
# GROUNDWATER MONITORING DATA AND DETECTED EXCEEDANCES
# 2023 QUARTER 2
# *GYPSUM MANAGEMENT FACILTIY (GMF) POND, DUCK CREEK POWER PLANT, CANTON, ILLINOIS*

September 12, 2023

Samples were collected on May 11, 12, and 15, 2023, and analyzed for the parameters listed in Title 35 of the Illinois Administrative Code (35 I.A.C.) Section (§) 845.600(a), calcium, and turbidity. Final laboratory analytical data was received on July 14, 2023.

The monitoring well locations are included in **Figure 1**. **Attachment A** summarizes the groundwater elevation data for the Quarter 2 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 2 2023 sampling event.

Statistical procedures used to evaluate groundwater results are provided in Appendix A of the Groundwater Monitoring Plan[1] provided in the operating permit application. In accordance with 35 I.A.C. § 845.610(b)(3)(B), the Quarter 2 2023 groundwater monitoring data were evaluated for statistically significant levels (SSLs) 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 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.

As allowed in 35 I.A.C. § 845.650(e), an alternate 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 (IEPA) within 60 days of this transmittal.

## TABLES


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


## FIGURES


Figure 1 35 I.A.C. § 845 Groundwater Monitoring Well Network


## ATTACHMENTS


Attachment A Groundwater Elevation Data - Quarter 2, 2023
Attachment B Laboratory Reports and Field Data Sheets - Quarter 2, 2023
Attachment C Comparison of Statistical Results to Background - Quarter 2, 2023


[1] Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2021. *Groundwater Monitoring Plan. Gypsum Management Facility Pond. Duck Creek Power Plant. Canton, Illinois. October 25, 2021.*

# TABLES

**TABLE 1.**
**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | Well Type | Event | Date | Parameter | Result | Unit |
|---|---|---|---|---|---|---|
| G02S | Background | E001 | 05/15/2023 | Antimony, total | 0.00043 U | mg/L |
| G02S | Background | E001 | 05/15/2023 | Arsenic, total | 0.00660 | mg/L |
| G02S | Background | E001 | 05/15/2023 | Barium, total | 0.180 | mg/L |
| G02S | Background | E001 | 05/15/2023 | Beryllium, total | 0.00059 U | mg/L |
| G02S | Background | E001 | 05/15/2023 | Boron, total | 0.0640 J+ | mg/L |
| G02S | Background | E001 | 05/15/2023 | Cadmium, total | 0.00074 U | mg/L |
| G02S | Background | E001 | 05/15/2023 | Calcium, total | 96.0 J+ | mg/L |
| G02S | Background | E001 | 05/15/2023 | Chloride, total | 2.60 | mg/L |
| G02S | Background | E001 | 05/15/2023 | Chromium, total | 0.0037 J | mg/L |
| G02S | Background | E001 | 05/15/2023 | Cobalt, total | 0.00048 U | mg/L |
| G02S | Background | E001 | 05/15/2023 | Dissolved Oxygen | 4.10 | mg/L |
| G02S | Background | E001 | 05/15/2023 | Fluoride, total | 0.282 | mg/L |
| G02S | Background | E001 | 05/15/2023 | Lead, total | 0.00034 J | mg/L |
| G02S | Background | E001 | 05/15/2023 | Lithium, total | 0.005 U | mg/L |
| G02S | Background | E001 | 05/15/2023 | Mercury, total | 0.00014 U | mg/L |
| G02S | Background | E001 | 05/15/2023 | Molybdenum, total | 0.001 U | mg/L |
| G02S | Background | E001 | 05/15/2023 | Oxidation Reduction Potential | -104 | mV |
| G02S | Background | E001 | 05/15/2023 | pH (field) | 6.8 | SU |
| G02S | Background | E001 | 05/15/2023 | Radium 226 + Radium 228, total | 1.42 J+ | pCi/L |
| G02S | Background | E001 | 05/15/2023 | Selenium, total | 0.00074 U | mg/L |
| G02S | Background | E001 | 05/15/2023 | Specific Conductance @ 25C (field) | 640 | micromhos/cm |
| G02S | Background | E001 | 05/15/2023 | Sulfate, total | 0.19 J | mg/L |
| G02S | Background | E001 | 05/15/2023 | Temperature | 14.3 | degrees C |
| G02S | Background | E001 | 05/15/2023 | Thallium, total | 0.00038 U | mg/L |
| G02S | Background | E001 | 05/15/2023 | Total Dissolved Solids | 430 | mg/L |
| G02S | Background | E001 | 05/15/2023 | Turbidity, field | 19.5 | NTU |
| G50S | Background | E001 | 05/15/2023 | Antimony, total | 0.00043 U | mg/L |
| G50S | Background | E001 | 05/15/2023 | Arsenic, total | 0.00069 U | mg/L |
| G50S | Background | E001 | 05/15/2023 | Barium, total | 0.0650 J+ | mg/L |
| G50S | Background | E001 | 05/15/2023 | Beryllium, total | 0.00059 U | mg/L |
| G50S | Background | E001 | 05/15/2023 | Boron, total | 0.0300 J+ | mg/L |
| G50S | Background | E001 | 05/15/2023 | Cadmium, total | 0.00074 U | mg/L |
| G50S | Background | E001 | 05/15/2023 | Calcium, total | 90.0 J+ | mg/L |
| G50S | Background | E001 | 05/15/2023 | Chloride, total | 9.50 | mg/L |
| G50S | Background | E001 | 05/15/2023 | Chromium, total | 0.0028 U | mg/L |
| G50S | Background | E001 | 05/15/2023 | Cobalt, total | 0.00072 J | mg/L |
| G50S | Background | E001 | 05/15/2023 | Dissolved Oxygen | 6.80 | mg/L |
| G50S | Background | E001 | 05/15/2023 | Fluoride, total | 0.225 J | mg/L |
| G50S | Background | E001 | 05/15/2023 | Lead, total | 0.0003 J | mg/L |
| G50S | Background | E001 | 05/15/2023 | Lithium, total | 0.005 U | mg/L |
| G50S | Background | E001 | 05/15/2023 | Mercury, total | 0.00014 U | mg/L |
| G50S | Background | E001 | 05/15/2023 | Molybdenum, total | 0.00087 J+ | mg/L |
| G50S | Background | E001 | 05/15/2023 | Oxidation Reduction Potential | -103 | mV |
| G50S | Background | E001 | 05/15/2023 | pH (field) | 7.3 | SU |
| G50S | Background | E001 | 05/15/2023 | Radium 226 + Radium 228, total | 0.146 | pCi/L |
| G50S | Background | E001 | 05/15/2023 | Selenium, total | 0.00074 U | mg/L |

**TABLE 1.**
**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | Well Type | Event | Date | Parameter | Result | Unit |
|---|---|---|---|---|---|---|
| G50S | Background | E001 | 05/15/2023 | Specific Conductance @ 25C (field) | 561 | micromhos/cm |
| G50S | Background | E001 | 05/15/2023 | Sulfate, total | 40.0 | mg/L |
| G50S | Background | E001 | 05/15/2023 | Temperature | 14.1 | degrees C |
| G50S | Background | E001 | 05/15/2023 | Thallium, total | 0.00038 U | mg/L |
| G50S | Background | E001 | 05/15/2023 | Total Dissolved Solids | 380 | mg/L |
| G50S | Background | E001 | 05/15/2023 | Turbidity, field | 66.7 | NTU |
| G51S | Background | E001 | 05/15/2023 | Antimony, total | 0.00043 U | mg/L |
| G51S | Background | E001 | 05/15/2023 | Arsenic, total | 0.00540 | mg/L |
| G51S | Background | E001 | 05/15/2023 | Barium, total | 0.100 J+ | mg/L |
| G51S | Background | E001 | 05/15/2023 | Beryllium, total | 0.00059 U | mg/L |
| G51S | Background | E001 | 05/15/2023 | Boron, total | 0.0210 J+ | mg/L |
| G51S | Background | E001 | 05/15/2023 | Cadmium, total | 0.00074 U | mg/L |
| G51S | Background | E001 | 05/15/2023 | Calcium, total | 98.0 J+ | mg/L |
| G51S | Background | E001 | 05/15/2023 | Chloride, total | 12.0 | mg/L |
| G51S | Background | E001 | 05/15/2023 | Chromium, total | 0.0028 U | mg/L |
| G51S | Background | E001 | 05/15/2023 | Cobalt, total | 0.00048 U | mg/L |
| G51S | Background | E001 | 05/15/2023 | Dissolved Oxygen | 1.30 | mg/L |
| G51S | Background | E001 | 05/15/2023 | Fluoride, total | 0.206 J | mg/L |
| G51S | Background | E001 | 05/15/2023 | Lead, total | 0.00210 | mg/L |
| G51S | Background | E001 | 05/15/2023 | Lithium, total | 0.005 U | mg/L |
| G51S | Background | E001 | 05/15/2023 | Mercury, total | 0.00014 U | mg/L |
| G51S | Background | E001 | 05/15/2023 | Molybdenum, total | 0.00091 J+ | mg/L |
| G51S | Background | E001 | 05/15/2023 | Oxidation Reduction Potential | -53.0 | mV |
| G51S | Background | E001 | 05/15/2023 | pH (field) | 7.1 | SU |
| G51S | Background | E001 | 05/15/2023 | Radium 226 + Radium 228, total | 1.07 J+ | pCi/L |
| G51S | Background | E001 | 05/15/2023 | Selenium, total | 0.00074 U | mg/L |
| G51S | Background | E001 | 05/15/2023 | Specific Conductance @ 25C (field) | 600 | micromhos/cm |
| G51S | Background | E001 | 05/15/2023 | Sulfate, total | 56.0 | mg/L |
| G51S | Background | E001 | 05/15/2023 | Temperature | 13.6 | degrees C |
| G51S | Background | E001 | 05/15/2023 | Thallium, total | 0.00038 U | mg/L |
| G51S | Background | E001 | 05/15/2023 | Total Dissolved Solids | 430 | mg/L |
| G51S | Background | E001 | 05/15/2023 | Turbidity, field | 430 | NTU |
| G54L | Compliance | E001 | 05/12/2023 | Antimony, total | 0.00043 U | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Arsenic, total | 0.00250 | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Barium, total | 0.210 | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Beryllium, total | 0.00059 U | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Boron, total | 0.0950 J+ | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Cadmium, total | 0.00074 U | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Calcium, total | 190 | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Chloride, total | 33.0 | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Chromium, total | 0.0028 U | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Cobalt, total | 0.0011 J | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Dissolved Oxygen | 1.00 | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Fluoride, total | 0.188 J | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Lead, total | 0.00022 U | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Lithium, total | 0.005 U | mg/L |

**TABLE 1.**
**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | Well Type | Event | Date | Parameter | Result | Unit |
|---|---|---|---|---|---|---|
| G54L | Compliance | E001 | 05/12/2023 | Mercury, total | 0.00014 U | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Molybdenum, total | 0.001 U | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Oxidation Reduction Potential | -37.5 | mV |
| G54L | Compliance | E001 | 05/12/2023 | pH (field) | 6.5 | SU |
| G54L | Compliance | E001 | 05/12/2023 | Radium 226 + Radium 228, total | 0.495 | pCi/L |
| G54L | Compliance | E001 | 05/12/2023 | Selenium, total | 0.00074 U | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Specific Conductance @ 25C (field) | 1,505 | micromhos/cm |
| G54L | Compliance | E001 | 05/12/2023 | Sulfate, total | 120 | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Temperature | 20.4 | degrees C |
| G54L | Compliance | E001 | 05/12/2023 | Thallium, total | 0.00038 U | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Total Dissolved Solids | 520 | mg/L |
| G54L | Compliance | E001 | 05/12/2023 | Turbidity, field | 130 | NTU |
| G54S | Compliance | E001 | 05/12/2023 | Antimony, total | 0.00043 U | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Arsenic, total | 0.00098 J | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Barium, total | 0.210 | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Beryllium, total | 0.00059 U | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Boron, total | 0.0620 J+ | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Cadmium, total | 0.00074 U | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Calcium, total | 130 | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Chloride, total | 4.8 U | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Chromium, total | 0.0028 U | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Cobalt, total | 0.00048 U | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Dissolved Oxygen | 1.20 | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Fluoride, total | 0.186 J | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Lead, total | 0.00022 U | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Lithium, total | 0.0069 J | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Mercury, total | 0.00014 U | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Molybdenum, total | 0.00110 | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Oxidation Reduction Potential | -30.0 | mV |
| G54S | Compliance | E001 | 05/12/2023 | pH (field) | 6.7 | SU |
| G54S | Compliance | E001 | 05/12/2023 | Radium 226 + Radium 228, total | 0.881 J+ | pCi/L |
| G54S | Compliance | E001 | 05/12/2023 | Selenium, total | 0.00074 U | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Specific Conductance @ 25C (field) | 796 | micromhos/cm |
| G54S | Compliance | E001 | 05/12/2023 | Sulfate, total | 31.0 | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Temperature | 16.3 | degrees C |
| G54S | Compliance | E001 | 05/12/2023 | Thallium, total | 0.00038 U | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Total Dissolved Solids | 540 | mg/L |
| G54S | Compliance | E001 | 05/12/2023 | Turbidity, field | 40.5 | NTU |
| G57S | Compliance | E001 | 05/11/2023 | Antimony, total | 0.00043 U | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Arsenic, total | 0.00069 U | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Barium, total | 0.170 | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Beryllium, total | 0.00059 U | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Boron, total | 0.01 UJ | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Cadmium, total | 0.00074 U | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Calcium, total | 170 | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Chloride, total | 16.0 | mg/L |

**TABLE 1.**
**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | Well Type | Event | Date | Parameter | Result | Unit |
|---|---|---|---|---|---|---|
| G57S | Compliance | E001 | 05/11/2023 | Chromium, total | 0.0029 J | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Cobalt, total | 0.00048 U | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Dissolved Oxygen | 2.60 | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Fluoride, total | 0.243 J | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Lead, total | 0.00026 J | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Lithium, total | 0.005 U | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Mercury, total | 0.00017 J | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Molybdenum, total | 0.00074 U | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Oxidation Reduction Potential | 125 | mV |
| G57S | Compliance | E001 | 05/11/2023 | pH (field) | 6.9 | SU |
| G57S | Compliance | E001 | 05/11/2023 | Radium 226 + Radium 228, total | 0.432 <0 | pCi/L |
| G57S | Compliance | E001 | 05/11/2023 | Selenium, total | 0.00074 U | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Specific Conductance @ 25C (field) | 1,281 | micromhos/cm |
| G57S | Compliance | E001 | 05/11/2023 | Sulfate, total | 49.0 | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Temperature | 17.7 | degrees C |
| G57S | Compliance | E001 | 05/11/2023 | Thallium, total | 0.00038 U | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Total Dissolved Solids | 890 J+ | mg/L |
| G57S | Compliance | E001 | 05/11/2023 | Turbidity, field | 46.8 | NTU |
| G60L | Compliance | E001 | 05/12/2023 | Antimony, total | 0.00043 U | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Arsenic, total | 0.00069 U | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Barium, total | 0.0180 | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Beryllium, total | 0.00059 U | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Boron, total | 0.0420 J+ | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Cadmium, total | 0.00074 U | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Calcium, total | 100 | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Chloride, total | 11.0 | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Chromium, total | 0.0028 U | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Cobalt, total | 0.00300 | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Dissolved Oxygen | 2.40 | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Fluoride, total | 0.072 J | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Lead, total | 0.00022 U | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Lithium, total | 0.005 U | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Mercury, total | 0.00014 U | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Molybdenum, total | 0.00074 U | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Oxidation Reduction Potential | 242 | mV |
| G60L | Compliance | E001 | 05/12/2023 | pH (field) | 6.0 | SU |
| G60L | Compliance | E001 | 05/12/2023 | Radium 226 + Radium 228, total | 0.209 <0 | pCi/L |
| G60L | Compliance | E001 | 05/12/2023 | Selenium, total | 0.00074 U | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Specific Conductance @ 25C (field) | 720 | micromhos/cm |
| G60L | Compliance | E001 | 05/12/2023 | Sulfate, total | 160 | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Temperature | 13.7 | degrees C |
| G60L | Compliance | E001 | 05/12/2023 | Thallium, total | 0.00038 U | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Total Dissolved Solids | 510 | mg/L |
| G60L | Compliance | E001 | 05/12/2023 | Turbidity, field | 15.4 | NTU |
| G60S | Compliance | E001 | 05/12/2023 | Antimony, total | 0.00043 U | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Arsenic, total | 0.00370 | mg/L |

**TABLE 1.**
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845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | Well Type | Event | Date | Parameter | Result | Unit |
|---|---|---|---|---|---|---|
| G60S | Compliance | E001 | 05/12/2023 | Barium, total | 0.160 | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Beryllium, total | 0.00059 U | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Boron, total | 0.0300 J+ | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Cadmium, total | 0.00074 U | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Calcium, total | 140 | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Chloride, total | 7.00 | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Chromium, total | 0.00570 | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Cobalt, total | 0.0012 J | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Dissolved Oxygen | 1.20 | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Fluoride, total | 0.179 J | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Lead, total | 0.00310 | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Lithium, total | 0.0052 J | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Mercury, total | 0.00014 U | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Molybdenum, total | 0.00120 | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Oxidation Reduction Potential | -21.7 | mV |
| G60S | Compliance | E001 | 05/12/2023 | pH (field) | 6.8 | SU |
| G60S | Compliance | E001 | 05/12/2023 | Radium 226 + Radium 228, total | 0.911 J+ | pCi/L |
| G60S | Compliance | E001 | 05/12/2023 | Selenium, total | 0.00074 U | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Specific Conductance @ 25C (field) | 956 | micromhos/cm |
| G60S | Compliance | E001 | 05/12/2023 | Sulfate, total | 68.0 | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Temperature | 17.6 | degrees C |
| G60S | Compliance | E001 | 05/12/2023 | Thallium, total | 0.00038 U | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Total Dissolved Solids | 600 | mg/L |
| G60S | Compliance | E001 | 05/12/2023 | Turbidity, field | 1,000 | NTU |
| G64L | Compliance | E001 | 05/15/2023 | Antimony, total | 0.0019 J | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Arsenic, total | 0.00160 | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Barium, total | 0.100 J+ | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Beryllium, total | 0.00059 U | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Boron, total | 0.0310 J+ | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Cadmium, total | 0.00074 U | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Calcium, total | 110 J+ | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Chloride, total | 2.80 | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Chromium, total | 0.00740 | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Cobalt, total | 0.00087 J | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Dissolved Oxygen | 3.90 | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Fluoride, total | 0.241 J | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Lead, total | 0.00200 | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Lithium, total | 0.005 U | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Mercury, total | 0.00014 U | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Molybdenum, total | 0.00160 | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Oxidation Reduction Potential | 133 | mV |
| G64L | Compliance | E001 | 05/15/2023 | pH (field) | 7.0 | SU |
| G64L | Compliance | E001 | 05/15/2023 | Radium 226 + Radium 228, total | 0.938 J+ | pCi/L |
| G64L | Compliance | E001 | 05/15/2023 | Selenium, total | 0.00074 U | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Specific Conductance @ 25C (field) | 958 | micromhos/cm |
| G64L | Compliance | E001 | 05/15/2023 | Sulfate, total | 69.0 | mg/L |

**TABLE 1.**
**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | Well Type | Event | Date | Parameter | Result | Unit |
|---|---|---|---|---|---|---|
| G64L | Compliance | E001 | 05/15/2023 | Temperature | 16.1 | degrees C |
| G64L | Compliance | E001 | 05/15/2023 | Thallium, total | 0.00038 U | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Total Dissolved Solids | 600 | mg/L |
| G64L | Compliance | E001 | 05/15/2023 | Turbidity, field | 259 | NTU |
| G64S | Compliance | E001 | 05/11/2023 | Antimony, total | 0.00043 U | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Arsenic, total | 0.00120 | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Barium, total | 0.150 | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Beryllium, total | 0.00059 U | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Boron, total | 0.0140 J+ | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Cadmium, total | 0.00074 U | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Calcium, total | 97.0 | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Chloride, total | 3.40 | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Chromium, total | 0.0028 U | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Cobalt, total | 0.00048 U | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Dissolved Oxygen | 4.60 | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Fluoride, total | 0.294 | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Lead, total | 0.00022 U | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Lithium, total | 0.005 U | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Mercury, total | 0.00014 U | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Molybdenum, total | 0.00097 J | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Oxidation Reduction Potential | -33.0 | mV |
| G64S | Compliance | E001 | 05/11/2023 | pH (field) | 6.9 | SU |
| G64S | Compliance | E001 | 05/11/2023 | Radium 226 + Radium 228, total | 0.232 <0 | pCi/L |
| G64S | Compliance | E001 | 05/11/2023 | Selenium, total | 0.00074 U | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Specific Conductance @ 25C (field) | 765 | micromhos/cm |
| G64S | Compliance | E001 | 05/11/2023 | Sulfate, total | 23.0 | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Temperature | 16.4 | degrees C |
| G64S | Compliance | E001 | 05/11/2023 | Thallium, total | 0.00038 U | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Total Dissolved Solids | 450 J+ | mg/L |
| G64S | Compliance | E001 | 05/11/2023 | Turbidity, field | 48.5 | 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.
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 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | HSU | Event | Parameter | Units | Date Range | Sample Count | Percent ND | Statistical Calculation | Statistical Result | GWPS | GWPS Source | Exceedance Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G54L | UA/PMP | E001 | Antimony, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.003 | 0.006 | Standard | No Exceedance |
| G54L | UA/PMP | E001 | Arsenic, total | mg/L | 04/14/21 - 05/12/23 | 9 | 0 | CB around linear reg | -0.0111 | 0.01 | Standard | No Exceedance |
| G54L | UA/PMP | E001 | Barium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 0 | CI around mean | 0.148 | 2 | Standard | No Exceedance |
| G54L | UA/PMP | E001 | Beryllium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.004 | Standard | No Exceedance |
| G54L | UA/PMP | E001 | Boron, total | mg/L | 04/14/21 - 05/12/23 | 10 | 0 | CI around geomean | 0.0162 | 2 | Standard | No Exceedance |
| G54L | UA/PMP | E001 | Cadmium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.005 | Standard | No Exceedance |
| G54L | UA/PMP | E001 | Chloride, total | mg/L | 04/14/21 - 05/12/23 | 10 | 0 | CI around mean | 15 | 200 | Standard | No Exceedance |
| G54L | UA/PMP | E001 | Chromium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 89 | CI around median | 0.004 | 0.1 | Standard | No Exceedance |
| G54L | UA/PMP | E001 | Cobalt, total | mg/L | 04/14/21 - 05/12/23 | 9 | 33 | CI around geomean | 0.00189 | 0.006 | Standard | No Exceedance |
| G54L | UA/PMP | E001 | Fluoride, total | mg/L | 04/14/21 - 05/12/23 | 10 | 90 | CI around median | 0.25 | 4 | Standard | No Exceedance |
| G54L | UA/PMP | E001 | Lead, total | mg/L | 04/14/21 - 05/12/23 | 9 | 82 | Most recent sample | 0.001 | 0.015 | Background | No Exceedance |
| G54L | UA/PMP | E001 | Lithium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.02 | 0.04 | Standard | No Exceedance |
| G54L | UA/PMP | E001 | Mercury, total | mg/L | 04/14/21 - 05/12/23 | 9 | 89 | CI around median | 0.0002 | 0.002 | Standard | No Exceedance |
| G54L | UA/PMP | E001 | Molybdenum, total | mg/L | 04/14/21 - 05/12/23 | 9 | 44 | CI around geomean | 0.000861 | 0.1 | Standard | No Exceedance |
| G54L | UA/PMP | E001 | pH (field) | SU | 04/14/21 - 05/12/23 | 16 | 0 | CI around median | 6.5/6.6 | 6.5/9 | Stnd/Standard | No Exceedance |
| G54L | UA/PMP | E001 | Radium 226 + Radium 228, total | pCi/L | 04/14/21 - 05/12/23 | 9 | 0 | CI around mean | 0.288 | 5 | Standard | No Exceedance |
| G54L | UA/PMP | E001 | Selenium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.05 | Standard | No Exceedance |
| G54L | UA/PMP | E001 | Sulfate, total | mg/L | 04/14/21 - 05/12/23 | 10 | 0 | CI around mean | 61.3 | 400 | Standard | No Exceedance |
| G54L | UA/PMP | E001 | Thallium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.002 | Standard | No Exceedance |
| G54L | UA/PMP | E001 | Total Dissolved Solids | mg/L | 04/14/21 - 05/12/23 | 16 | 0 | CI around mean | 689 | 1,200 | Standard | No Exceedance |
| G54S | UA | E001 | Antimony, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.003 | 0.006 | Standard | No Exceedance |
| G54S | UA | E001 | Arsenic, total | mg/L | 12/04/15 - 05/12/23 | 9 | 22 | CI around geomean | 0.000842 | 0.01 | Standard | No Exceedance |
| G54S | UA | E001 | Barium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 0 | CI around mean | 0.213 | 2 | Standard | No Exceedance |
| G54S | UA | E001 | Beryllium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.004 | Standard | No Exceedance |
| G54S | UA | E001 | Boron, total | mg/L | 12/04/15 - 05/12/23 | 23 | 0 | CI around mean | 0.0317 | 2 | Standard | No Exceedance |
| G54S | UA | E001 | Cadmium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.005 | Standard | No Exceedance |
| G54S | UA | E001 | Chloride, total | mg/L | 12/04/15 - 05/12/23 | 21 | 8 | CI around mean | 2.02 | 200 | Standard | No Exceedance |

**TABLE 2.**
**COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | HSU | Event | Parameter | Units | Date Range | Sample Count | Percent ND | Statistical Calculation | Statistical Result | GWPS | GWPS Source | Exceedance Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G54S | UA | E001 | Chromium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.004 | 0.1 | Standard | No Exceedance |
| G54S | UA | E001 | Cobalt, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.002 | 0.006 | Standard | No Exceedance |
| G54S | UA | E001 | Fluoride, total | mg/L | 12/04/15 - 05/12/23 | 22 | 78 | CI around median | 0.25 | 4 | Standard | No Exceedance |
| G54S | UA | E001 | Lead, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.015 | Background | No Exceedance |
| G54S | UA | E001 | Lithium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 67 | CI around median | 0.01 | 0.04 | Standard | No Exceedance |
| G54S | UA | E001 | Mercury, total | mg/L | 12/04/15 - 05/12/23 | 9 | 90 | CI around median | 0.0002 | 0.002 | Standard | No Exceedance |
| G54S | UA | E001 | Molybdenum, total | mg/L | 12/04/15 - 05/12/23 | 9 | 0 | CI around mean | 0.00145 | 0.1 | Standard | No Exceedance |
| G54S | UA | E001 | pH (field) | SU | 12/04/15 - 05/12/23 | 30 | 0 | CB around linear reg | 6.5/7.0 | 6.5/9 | Stnd/Standard | No Exceedance |
| G54S | UA | E001 | Radium 226 + Radium 228, total | pCi/L | 12/04/15 - 05/12/23 | 9 | 0 | CI around mean | 0.576 | 5 | Standard | No Exceedance |
| G54S | UA | E001 | Selenium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.05 | Standard | No Exceedance |
| G54S | UA | E001 | Sulfate, total | mg/L | 12/04/15 - 05/12/23 | 21 | 0 | CB around T-S line | 31 | 400 | Standard | No Exceedance |
| G54S | UA | E001 | Thallium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.002 | Standard | No Exceedance |
| G54S | UA | E001 | Total Dissolved Solids | mg/L | 12/04/15 - 05/12/23 | 29 | 0 | CI around mean | 515 | 1,200 | Standard | No Exceedance |
| G57S | UA | E001 | Antimony, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | CI around median | 0.003 | 0.006 | Standard | No Exceedance |
| G57S | UA | E001 | Arsenic, total | mg/L | 12/04/15 - 05/11/23 | 9 | 89 | Most recent sample | 0.001 | 0.01 | Standard | No Exceedance |
| G57S | UA | E001 | Barium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 0 | CI around median | 0.13 | 2 | Standard | No Exceedance |
| G57S | UA | E001 | Beryllium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | CI around median | 0.001 | 0.004 | Standard | No Exceedance |
| G57S | UA | E001 | Boron, total | mg/L | 12/04/15 - 05/11/23 | 22 | 42 | CI around median | 0.01 | 2 | Standard | No Exceedance |
| G57S | UA | E001 | Cadmium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 89 | CI around median | 0.001 | 0.005 | Standard | No Exceedance |
| G57S | UA | E001 | Chloride, total | mg/L | 12/04/15 - 05/11/23 | 21 | 2 | CI around median | 18 | 200 | Standard | No Exceedance |
| G57S | UA | E001 | Chromium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | Most recent sample | 0.004 | 0.1 | Standard | No Exceedance |
| G57S | UA | E001 | Cobalt, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | Most recent sample | 0.002 | 0.006 | Standard | No Exceedance |
| G57S | UA | E001 | Fluoride, total | mg/L | 12/04/15 - 05/11/23 | 23 | 33 | CI around geomean | 0.264 | 4 | Standard | No Exceedance |
| G57S | UA | E001 | Lead, total | mg/L | 12/04/15 - 05/11/23 | 9 | 72 | CI around median | 0.001 | 0.015 | Background | No Exceedance |
| G57S | UA | E001 | Lithium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 100 | All ND - Last | 0.02 | 0.04 | Standard | No Exceedance |
| G57S | UA | E001 | Mercury, total | mg/L | 12/04/15 - 05/11/23 | 9 | 100 | All ND - Last | 0.0002 | 0.002 | Standard | No Exceedance |
| G57S | UA | E001 | Molybdenum, total | mg/L | 12/04/15 - 05/11/23 | 9 | 89 | CI around median | 0.001 | 0.1 | Standard | No Exceedance |

**TABLE 2.**
**COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | HSU | Event | Parameter | Units | Date Range | Sample Count | Percent ND | Statistical Calculation | Statistical Result | GWPS | GWPS Source | Exceedance Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G57S | UA | E001 | pH (field) | SU | 12/04/15 - 05/11/23 | 29 | 0 | CB around linear reg | 6.6/6.9 | 6.5/9 | Stnd/Standard | No Exceedance |
| G57S | UA | E001 | Radium 226 + Radium 228, total | pCi/L | 12/04/15 - 05/11/23 | 9 | 0 | CI around mean | 0.0864 | 5 | Standard | No Exceedance |
| G57S | UA | E001 | Selenium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | Most recent sample | 0.001 | 0.05 | Standard | No Exceedance |
| G57S | UA | E001 | Sulfate, total | mg/L | 12/04/15 - 05/11/23 | 21 | 0 | CB around linear reg | 46.7 | 400 | Standard | No Exceedance |
| G57S | UA | E001 | Thallium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | CI around median | 0.001 | 0.002 | Standard | No Exceedance |
| G57S | UA | E001 | Total Dissolved Solids | mg/L | 12/04/15 - 05/11/23 | 29 | 0 | CB around linear reg | 737 | 1,200 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | Antimony, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.003 | 0.006 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | Arsenic, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.01 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | Barium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 0 | CI around mean | 0.0146 | 2 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | Beryllium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.004 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | Boron, total | mg/L | 04/14/21 - 05/12/23 | 10 | 0 | CI around geomean | 0.0237 | 2 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | Cadmium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.005 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | Chloride, total | mg/L | 04/14/21 - 05/12/23 | 10 | 0 | CB around linear reg | 8.09 | 200 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | Chromium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.004 | 0.1 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | Cobalt, total | mg/L | 04/14/21 - 05/12/23 | 9 | 22 | CI around mean | 0.00196 | 0.006 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | Fluoride, total | mg/L | 04/14/21 - 05/12/23 | 10 | 100 | All ND - Last | 0.25 | 4 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | Lead, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.015 | Background | No Exceedance |
| G60L | UA/PMP | E001 | Lithium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.02 | 0.04 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | Mercury, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.0002 | 0.002 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | Molybdenum, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.1 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | pH (field) | SU | 04/14/21 - 05/12/23 | 16 | 0 | CI around mean | 6.1/6.2 | 6.5/9 | Stnd/Standard | Determined |
| G60L | UA/PMP | E001 | Radium 226 + Radium 228, total | pCi/L | 04/14/21 - 05/12/23 | 9 | 0 | CI around mean | -0.0429 | 5 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | Selenium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.05 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | Sulfate, total | mg/L | 04/14/21 - 05/12/23 | 10 | 10 | CI around mean | 149 | 400 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | Thallium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.002 | Standard | No Exceedance |
| G60L | UA/PMP | E001 | Total Dissolved Solids | mg/L | 04/14/21 - 05/12/23 | 16 | 0 | CI around mean | 545 | 1,200 | Standard | No Exceedance |
| G60S | UA | E001 | Antimony, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.003 | 0.006 | Standard | No Exceedance |

**TABLE 2.**
**COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | HSU | Event | Parameter | Units | Date Range | Sample Count | Percent ND | Statistical Calculation | Statistical Result | GWPS | GWPS Source | Exceedance Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G60S | UA | E001 | Arsenic, total | mg/L | 12/04/15 - 05/12/23 | 9 | 18 | CI around geomean | 0.00111 | 0.01 | Standard | No Exceedance |
| G60S | UA | E001 | Barium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 0 | CI around mean | 0.129 | 2 | Standard | No Exceedance |
| G60S | UA | E001 | Beryllium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.004 | Standard | No Exceedance |
| G60S | UA | E001 | Boron, total | mg/L | 12/04/15 - 05/12/23 | 24 | 9 | CI around geomean | 0.0153 | 2 | Standard | No Exceedance |
| G60S | UA | E001 | Cadmium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.005 | Standard | No Exceedance |
| G60S | UA | E001 | Chloride, total | mg/L | 12/04/15 - 05/12/23 | 22 | 2 | CI around geomean | 8.14 | 200 | Standard | No Exceedance |
| G60S | UA | E001 | Chromium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 67 | CI around median | 0.004 | 0.1 | Standard | No Exceedance |
| G60S | UA | E001 | Cobalt, total | mg/L | 12/04/15 - 05/12/23 | 9 | 89 | CI around median | 0.002 | 0.006 | Standard | No Exceedance |
| G60S | UA | E001 | Fluoride, total | mg/L | 12/04/15 - 05/12/23 | 23 | 44 | CI around median | 0.25 | 4 | Standard | No Exceedance |
| G60S | UA | E001 | Lead, total | mg/L | 12/04/15 - 05/12/23 | 9 | 35 | CI around median | 0.001 | 0.015 | Background | No Exceedance |
| G60S | UA | E001 | Lithium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 89 | CI around median | 0.01 | 0.04 | Standard | No Exceedance |
| G60S | UA | E001 | Mercury, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.0002 | 0.002 | Standard | No Exceedance |
| G60S | UA | E001 | Molybdenum, total | mg/L | 12/04/15 - 05/12/23 | 9 | 67 | CI around median | 0.001 | 0.1 | Standard | No Exceedance |
| G60S | UA | E001 | pH (field) | SU | 12/04/15 - 05/12/23 | 30 | 0 | CI around mean | 6.7/6.8 | 6.5/9 | Stnd/Standard | No Exceedance |
| G60S | UA | E001 | Radium 226 + Radium 228, total | pCi/L | 12/04/15 - 05/12/23 | 9 | 0 | CI around mean | 0.701 | 5 | Standard | No Exceedance |
| G60S | UA | E001 | Selenium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 89 | CI around median | 0.001 | 0.05 | Standard | No Exceedance |
| G60S | UA | E001 | Sulfate, total | mg/L | 12/04/15 - 05/12/23 | 23 | 0 | CI around median | 64 | 400 | Standard | No Exceedance |
| G60S | UA | E001 | Thallium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.002 | Standard | No Exceedance |
| G60S | UA | E001 | Total Dissolved Solids | mg/L | 12/04/15 - 05/12/23 | 30 | 0 | CI around mean | 557 | 1,200 | Standard | No Exceedance |
| G64L | UA/PMP | E001 | Antimony, total | mg/L | 05/15/23 - 05/15/23 | 1 | 100 | Most recent sample | 0.003 | 0.006 | Standard | No Exceedance |
| G64L | UA/PMP | E001 | Arsenic, total | mg/L | 05/15/23 - 05/15/23 | 1 | 29 | Most recent sample | 0.0016 | 0.01 | Standard | No Exceedance |
| G64L | UA/PMP | E001 | Barium, total | mg/L | 05/15/23 - 05/15/23 | 1 | 0 | Most recent sample | 0.1 | 2 | Standard | No Exceedance |
| G64L | UA/PMP | E001 | Beryllium, total | mg/L | 05/15/23 - 05/15/23 | 1 | 100 | Most recent sample | 0.001 | 0.004 | Standard | No Exceedance |
| G64L | UA/PMP | E001 | Boron, total | mg/L | 01/11/23 - 05/15/23 | 2 | 12 | Most recent sample | 0.031 | 2 | Standard | No Exceedance |
| G64L | UA/PMP | E001 | Cadmium, total | mg/L | 05/15/23 - 05/15/23 | 1 | 100 | Most recent sample | 0.001 | 0.005 | Standard | No Exceedance |
| G64L | UA/PMP | E001 | Chloride, total | mg/L | 01/11/23 - 05/15/23 | 2 | 12 | Most recent sample | 2.8 | 200 | Standard | No Exceedance |
| G64L | UA/PMP | E001 | Chromium, total | mg/L | 05/15/23 - 05/15/23 | 1 | 0 | Most recent sample | 0.0074 | 0.1 | Standard | No Exceedance |

**TABLE 2.**
**COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | HSU | Event | Parameter | Units | Date Range | Sample Count | Percent ND | Statistical Calculation | Statistical Result | GWPS | GWPS Source | Exceedance Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G64L | UA/PMP | E001 | Cobalt, total | mg/L | 05/15/23 - 05/15/23 | 1 | 100 | Most recent sample | 0.002 | 0.006 | Standard | No Exceedance |
| G64L | UA/PMP | E001 | Fluoride, total | mg/L | 01/11/23 - 05/15/23 | 2 | 50 | Most recent sample | 0.25 | 4 | Standard | No Exceedance |
| G64L | UA/PMP | E001 | Lead, total | mg/L | 05/15/23 - 05/15/23 | 1 | 29 | Most recent sample | 0.002 | 0.015 | Background | No Exceedance |
| G64L | UA/PMP | E001 | Lithium, total | mg/L | 05/15/23 - 05/15/23 | 1 | 100 | Most recent sample | 0.02 | 0.04 | Standard | No Exceedance |
| G64L | UA/PMP | E001 | Mercury, total | mg/L | 05/15/23 - 05/15/23 | 1 | 100 | Most recent sample | 0.0002 | 0.002 | Standard | No Exceedance |
| G64L | UA/PMP | E001 | Molybdenum, total | mg/L | 05/15/23 - 05/15/23 | 1 | 0 | Most recent sample | 0.0016 | 0.1 | Standard | No Exceedance |
| G64L | UA/PMP | E001 | pH (field) | SU | 01/11/23 - 05/15/23 | 2 | 0 | Most recent sample | 7.0/7.0 | 6.5/9 | Stnd/Standard | No Exceedance |
| G64L | UA/PMP | E001 | Radium 226 + Radium 228, total | pCi/L | 05/15/23 - 05/15/23 | 1 | 0 | Most recent sample | 0.938 | 5 | Standard | No Exceedance |
| G64L | UA/PMP | E001 | Selenium, total | mg/L | 05/15/23 - 05/15/23 | 1 | 100 | Most recent sample | 0.001 | 0.05 | Standard | No Exceedance |
| G64L | UA/PMP | E001 | Sulfate, total | mg/L | 01/11/23 - 05/15/23 | 2 | 0 | Most recent sample | 69 | 400 | Standard | No Exceedance |
| G64L | UA/PMP | E001 | Thallium, total | mg/L | 05/15/23 - 05/15/23 | 1 | 100 | Most recent sample | 0.001 | 0.002 | Standard | No Exceedance |
| G64L | UA/PMP | E001 | Total Dissolved Solids | mg/L | 01/11/23 - 05/15/23 | 2 | 0 | Most recent sample | 600 | 1,200 | Standard | No Exceedance |
| G64S | UA | E001 | Antimony, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | CI around median | 0.003 | 0.006 | Standard | No Exceedance |
| G64S | UA | E001 | Arsenic, total | mg/L | 12/04/15 - 05/11/23 | 9 | 0 | CI around mean | 0.00193 | 0.01 | Standard | No Exceedance |
| G64S | UA | E001 | Barium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 0 | CI around mean | 0.163 | 2 | Standard | No Exceedance |
| G64S | UA | E001 | Beryllium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 100 | All ND - Last | 0.001 | 0.004 | Standard | No Exceedance |
| G64S | UA | E001 | Boron, total | mg/L | 12/04/15 - 05/11/23 | 22 | 3 | CI around geomean | 0.0147 | 2 | Standard | No Exceedance |
| G64S | UA | E001 | Cadmium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 100 | All ND - Last | 0.001 | 0.005 | Standard | No Exceedance |
| G64S | UA | E001 | Chloride, total | mg/L | 12/04/15 - 05/11/23 | 21 | 2 | CI around median | 3.5 | 200 | Standard | No Exceedance |
| G64S | UA | E001 | Chromium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | CI around median | 0.004 | 0.1 | Standard | No Exceedance |
| G64S | UA | E001 | Cobalt, total | mg/L | 12/04/15 - 05/11/23 | 9 | 100 | All ND - Last | 0.002 | 0.006 | Standard | No Exceedance |
| G64S | UA | E001 | Fluoride, total | mg/L | 12/04/15 - 05/11/23 | 23 | 12 | CI around median | 0.287 | 4 | Standard | No Exceedance |
| G64S | UA | E001 | Lead, total | mg/L | 12/04/15 - 05/11/23 | 9 | 33 | CI around mean | 0.000747 | 0.015 | Background | No Exceedance |
| G64S | UA | E001 | Lithium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 100 | All ND - Last | 0.02 | 0.04 | Standard | No Exceedance |
| G64S | UA | E001 | Mercury, total | mg/L | 12/04/15 - 05/11/23 | 9 | 100 | All ND - Last | 0.0002 | 0.002 | Standard | No Exceedance |
| G64S | UA | E001 | Molybdenum, total | mg/L | 12/04/15 - 05/11/23 | 9 | 11 | CI around mean | 0.00119 | 0.1 | Standard | No Exceedance |
| G64S | UA | E001 | pH (field) | SU | 12/04/15 - 05/11/23 | 30 | 0 | CI around median | 6.8/7.0 | 6.5/9 | Stnd/Standard | No Exceedance |

**TABLE 2.**
**COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | HSU | Event | Parameter | Units | Date Range | Sample Count | Percent ND | Statistical Calculation | Statistical Result | GWPS | GWPS Source | Exceedance Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G64S | UA | E001 | Radium 226 + Radium 228, total | pCi/L | 12/04/15 - 05/11/23 | 9 | 0 | CI around mean | 0.515 | 5 | Standard | No Exceedance |
| G64S | UA | E001 | Selenium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | CI around median | 0.001 | 0.05 | Standard | No Exceedance |
| G64S | UA | E001 | Sulfate, total | mg/L | 12/04/15 - 05/11/23 | 21 | 0 | CI around mean | 23.8 | 400 | Standard | No Exceedance |
| G64S | UA | E001 | Thallium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 100 | All ND - Last | 0.001 | 0.002 | Standard | No Exceedance |
| G64S | UA | E001 | Total Dissolved Solids | mg/L | 12/04/15 - 05/11/23 | 28 | 0 | CI around mean | 424 | 1,200 | Standard | No Exceedance |

**Notes:**
Exceedance Type:

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

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

HSU = hydrostratigraphic unit:

UA = Uppermost Aquifer

UA/PMP = Uppermost Aquifer/Potential Migration Pathway

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 Statistical Analysis Plan using constituent concentrations observed at 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

BACKGROUND WELL
COMPLIANCE WELL
SOURCE SAMPLE LOCATION
REGULATED UNIT (SUBJECT UNIT)
FEATURE
PROPERTY BOUNDARY

0 150 300
Feet

# 35 I.A.C. § 845 Groundwater Monitoring Well Network

## GYPSUM MANAGEMENT FACILITY (GMF) POND
DUCK CREEK POWER PLANT
CANTON, ILLINOIS

**FIGURE 1**

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

## ATTACHMENTS

# ATTACHMENT A
# GROUNDWATER ELEVATION DATA
# QUARTER 2 2023

**ATTACHMENT A.**
**GROUNDWATER ELEVATION DATA - QUARTER 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | Well Type | Date | Depth to Groundwater (feet BMP) | Groundwater Elevation (feet NAVD88) |
|---|---|---|---|---|
| G02S | Background | 05/08/2023 | 5.57 | 616.09 |
| G50S | Background | 05/08/2023 | 11.42 | 612.23 |
| G51S | Background | 05/08/2023 | 8.84 | 610.82 |
| G54L | Compliance | 05/08/2023 | 22.31 | 600.64 |
| G54S | Compliance | 05/08/2023 | 23.53 | 599.45 |
| G57S | Compliance | 05/08/2023 | 20.37 | 602.39 |
| G60L | Compliance | 05/08/2023 | 12.10 | 603.29 |
| G60S | Compliance | 05/08/2023 | 25.34 | 589.69 |
| G64L | Compliance | 05/08/2023 | 20.89 | 601.57 |
| G64S | Compliance | 05/08/2023 | 23.40 | 599.66 |

**Notes:**
BMP = below measuring point
NAVD88 = North American Vertical Datum of 1988

# ATTACHMENT B
# LABORATORY REPORTS AND FIELD DATA SHEETS
# QUARTER 2 2023

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

June 13, 2023

Daryl Johnson
Vistra - Duck Creek
17751 North Cilco Road
Canton, IL 61520-8761

Dear Daryl Johnson:

Please find enclosed the **revised** 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.

Gail J Schindler

Gail Schindler
Project Manager
(309) 692-9688 x1716
gail.schindler@pacelabs.com

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## SAMPLE RECEIPT CHECK LIST

**Items not applicable will be marked as in compliance**

Work Order GE02632

| | |
|---|---|
| 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 |

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Work Order GE02767

| | |
|---|---|
| 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 |

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Work Order GE02997

| | |
|---|---|
| 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 |

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## Case Narrative

G08L water level below top of pump

Sample GE02997-10 nitrate was originally reported at 10x dilution but it was discovered the sample was analyzed at a 5x dilution. The corrected raw data page is numbered 289a. The incorrect page has been removed and the corrected page has been added in its place.

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## ANALYTICAL RESULTS

**Sample:** GE02632-11
**Name:** G57S
**Matrix:** Ground Water - Grab

**Sampled:** 05/11/23 15:22
**Received:** 05/11/23 17:20

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Anions - PIA** | | | | | | | | | |
| Chloride | 16 | mg/L | Q4 | 05/12/23 23:11 | 10 | 10 | 05/12/23 23:11 | CRD | EPA 300.0 REV 2.1 |
| Fluoride | < 0.250 | mg/L | | 05/12/23 21:24 | 1 | 0.250 | 05/12/23 21:24 | CRD | EPA 300.0 REV 2.1 |
| Sulfate | 49 | mg/L | Q4 | 05/12/23 23:11 | 10 | 10 | 05/12/23 23:11 | CRD | EPA 300.0 REV 2.1 |
| **Field - PIA** | | | | | | | | | |
| Depth, From Measuring Point | 20.25 | Feet | | 05/11/23 15:22 | 1 | | 05/11/23 15:22 | FIELD | Field* |
| Dissolved oxygen, Field | 2.6 | mg/L | | 05/11/23 15:22 | 1 | | 05/11/23 15:22 | FIELD | Field* |
| Oxidation Reduction Potential | 125 | mV | | 05/11/23 15:22 | 1 | -500 | 05/11/23 15:22 | FIELD | Field* |
| pH, Field Measured | 6.87 | pH Units | | 05/11/23 15:22 | 1 | | 05/11/23 15:22 | FIELD | Field* |
| Specific Conductance, Field Measured | 1281 | umhos/cm | | 05/11/23 15:22 | 1 | | 05/11/23 15:22 | FIELD | Field* |
| Temperature, Field Measured | 63.9 | °F | | 05/11/23 15:22 | 1 | | 05/11/23 15:22 | FIELD | Field* |
| Temperature, Field Measured | 17.7 | °C | | 05/11/23 15:22 | 1 | | 05/11/23 15:22 | FIELD | Field* |
| Turbidity, Field Measured | 46.8 | NTU | | 05/11/23 15:22 | 1 | 0.00 | 05/11/23 15:22 | FIELD | Field* |
| **General Chemistry - PIA** | | | | | | | | | |
| Alkalinity - bicarbonate as CaCO3 | 760 | mg/L | | 05/22/23 09:02 | 1 | 10 | 05/22/23 09:02 | CPS | SM 2320B 1997* |
| Alkalinity - carbonate as CaCO3 | < 10 | mg/L | | 05/22/23 09:02 | 1 | 10 | 05/22/23 09:02 | CPS | SM 2320B 1997* |
| **Soluble General Chemistry - PIA** | | | | | | | | | |
| Solids - total dissolved solids (TDS) | 890 | mg/L | M | 05/18/23 15:57 | 1 | 26 | 05/18/23 16:48 | HRF | SM 2540C |
| **Total Metals - PIA** | | | | | | | | | |
| Antimony | < 3.0 | ug/L | | 05/15/23 12:00 | 5 | 3.0 | 05/22/23 16:47 | JMW | EPA 6020A |
| Arsenic | < 1.0 | ug/L | | 05/15/23 12:00 | 5 | 1.0 | 05/23/23 12:35 | JMW | EPA 6020A |
| Barium | 170 | ug/L | | 05/15/23 12:00 | 5 | 1.0 | 05/22/23 16:47 | JMW | EPA 6020A |
| Beryllium | < 1.0 | ug/L | | 05/15/23 12:00 | 5 | 1.0 | 05/22/23 16:47 | JMW | EPA 6020A |
| Boron | < 10 | ug/L | | 05/15/23 12:00 | 5 | 10 | 05/23/23 14:55 | JMW | EPA 6020A |
| Cadmium | < 1.0 | ug/L | | 05/15/23 12:00 | 5 | 1.0 | 05/23/23 12:35 | JMW | EPA 6020A |
| Calcium | 170 | mg/L | | 05/15/23 12:00 | 5 | 0.20 | 05/23/23 12:35 | JMW | EPA 6020A |
| Chromium | < 4.0 | ug/L | | 05/15/23 12:00 | 5 | 4.0 | 05/23/23 12:35 | JMW | EPA 6020A |
| Cobalt | < 2.0 | ug/L | | 05/15/23 12:00 | 5 | 2.0 | 05/23/23 12:35 | JMW | EPA 6020A |
| Lead | < 1.0 | ug/L | | 05/15/23 12:00 | 5 | 1.0 | 05/22/23 16:47 | JMW | EPA 6020A |
| Magnesium | 97 | mg/L | | 05/15/23 12:00 | 5 | 0.10 | 05/23/23 12:35 | JMW | EPA 6020A |
| Mercury | < 0.20 | ug/L | | 05/15/23 12:00 | 5 | 0.20 | 05/22/23 16:47 | JMW | EPA 6020A |
| Molybdenum | < 1.0 | ug/L | | 05/15/23 12:00 | 5 | 1.0 | 05/23/23 12:35 | JMW | EPA 6020A |

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## ANALYTICAL RESULTS

**Sample:** GE02632-11
**Name:** G57S
**Matrix:** Ground Water - Grab

**Sampled:** 05/11/23 15:22
**Received:** 05/11/23 17:20

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | 0.31 | mg/L | | 05/15/23 12:00 | 5 | 0.10 | 05/23/23 12:35 | JMW | EPA 6020A |
| Selenium | < 1.0 | ug/L | | 05/15/23 12:00 | 5 | 1.0 | 05/23/23 12:35 | JMW | EPA 6020A |
| Sodium | 12 | mg/L | | 05/15/23 12:00 | 5 | 0.10 | 05/23/23 12:35 | JMW | EPA 6020A |
| Thallium | < 1.0 | ug/L | | 05/15/23 12:00 | 5 | 1.0 | 05/22/23 16:47 | JMW | EPA 6020A |
| Lithium | < 0.020 | mg/L | | 05/15/23 12:00 | 1 | 0.020 | 05/16/23 10:35 | TJJ | EPA 6010B |

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## ANALYTICAL RESULTS

**Sample:** GE02632-14
**Name:** G64S
**Matrix:** Ground Water - Grab

**Sampled:** 05/11/23 15:11
**Received:** 05/11/23 17:20

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Anions - PIA** | | | | | | | | | |
| Chloride | 3.4 | mg/L | | 05/12/23 23:33 | 1 | 1.0 | 05/12/23 23:33 | CRD | EPA 300.0 REV 2.1 |
| Fluoride | 0.294 | mg/L | | 05/12/23 23:33 | 1 | 0.250 | 05/12/23 23:33 | CRD | EPA 300.0 REV 2.1 |
| Sulfate | 23 | mg/L | | 05/12/23 23:54 | 10 | 10 | 05/12/23 23:54 | CRD | EPA 300.0 REV 2.1 |
| **Field - PIA** | | | | | | | | | |
| Depth, From Measuring Point | 23.26 | Feet | | 05/11/23 15:11 | 1 | | 05/11/23 15:11 | FIELD | Field* |
| Dissolved oxygen, Field | 4.6 | mg/L | | 05/11/23 15:11 | 1 | | 05/11/23 15:11 | FIELD | Field* |
| Oxidation Reduction Potential | -33.0 | mV | | 05/11/23 15:11 | 1 | -500 | 05/11/23 15:11 | FIELD | Field* |
| pH, Field Measured | 6.86 | pH Units | | 05/11/23 15:11 | 1 | | 05/11/23 15:11 | FIELD | Field* |
| Specific Conductance, Field Measured | 765.0 | umhos/cm | | 05/11/23 15:11 | 1 | | 05/11/23 15:11 | FIELD | Field* |
| Temperature, Field Measured | 16.4 | °C | | 05/11/23 15:11 | 1 | | 05/11/23 15:11 | FIELD | Field* |
| Temperature, Field Measured | 61.6 | °F | | 05/11/23 15:11 | 1 | | 05/11/23 15:11 | FIELD | Field* |
| Turbidity, Field Measured | 48.5 | NTU | | 05/11/23 15:11 | 1 | 0.00 | 05/11/23 15:11 | FIELD | Field* |
| **General Chemistry - PIA** | | | | | | | | | |
| Alkalinity - bicarbonate as CaCO3 | 410 | mg/L | | 05/22/23 09:02 | 1 | 10 | 05/22/23 09:02 | CPS | SM 2320B 1997* |
| Alkalinity - carbonate as CaCO3 | < 10 | mg/L | | 05/22/23 09:02 | 1 | 10 | 05/22/23 09:02 | CPS | SM 2320B 1997* |
| **Soluble General Chemistry - PIA** | | | | | | | | | |
| Solids - total dissolved solids (TDS) | 450 | mg/L | | 05/18/23 15:57 | 1 | 26 | 05/18/23 16:48 | HRF | SM 2540C |
| **Total Metals - PIA** | | | | | | | | | |
| Antimony | < 3.0 | ug/L | | 05/15/23 12:00 | 5 | 3.0 | 05/22/23 16:50 | JMW | EPA 6020A |
| Arsenic | 1.2 | ug/L | | 05/15/23 12:00 | 5 | 1.0 | 05/23/23 12:39 | JMW | EPA 6020A |
| Barium | 150 | ug/L | | 05/15/23 12:00 | 5 | 1.0 | 05/22/23 16:50 | JMW | EPA 6020A |
| Beryllium | < 1.0 | ug/L | | 05/15/23 12:00 | 5 | 1.0 | 05/22/23 16:50 | JMW | EPA 6020A |
| Boron | 14 | ug/L | | 05/15/23 12:00 | 5 | 10 | 05/23/23 14:59 | JMW | EPA 6020A |
| Cadmium | < 1.0 | ug/L | | 05/15/23 12:00 | 5 | 1.0 | 05/23/23 12:39 | JMW | EPA 6020A |
| Calcium | 97 | mg/L | | 05/15/23 12:00 | 5 | 0.20 | 05/23/23 12:39 | JMW | EPA 6020A |
| Chromium | < 4.0 | ug/L | | 05/15/23 12:00 | 5 | 4.0 | 05/23/23 12:39 | JMW | EPA 6020A |
| Cobalt | < 2.0 | ug/L | | 05/15/23 12:00 | 5 | 2.0 | 05/23/23 12:39 | JMW | EPA 6020A |
| Lead | < 1.0 | ug/L | | 05/15/23 12:00 | 5 | 1.0 | 05/22/23 16:50 | JMW | EPA 6020A |
| Magnesium | 44 | mg/L | | 05/15/23 12:00 | 5 | 0.10 | 05/23/23 12:39 | JMW | EPA 6020A |
| Mercury | < 0.20 | ug/L | | 05/15/23 12:00 | 5 | 0.20 | 05/22/23 16:50 | JMW | EPA 6020A |
| Molybdenum | < 1.0 | ug/L | | 05/15/23 12:00 | 5 | 1.0 | 05/23/23 12:39 | JMW | EPA 6020A |

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## ANALYTICAL RESULTS

**Sample:** GE02632-14
**Name:** G64S
**Matrix:** Ground Water - Grab

**Sampled:** 05/11/23 15:11
**Received:** 05/11/23 17:20

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | 0.56 | mg/L | | 05/15/23 12:00 | 5 | 0.10 | 05/23/23 12:39 | JMW | EPA 6020A |
| Selenium | < 1.0 | ug/L | | 05/15/23 12:00 | 5 | 1.0 | 05/23/23 12:39 | JMW | EPA 6020A |
| Sodium | 12 | mg/L | | 05/15/23 12:00 | 5 | 0.10 | 05/23/23 12:39 | JMW | EPA 6020A |
| Thallium | < 1.0 | ug/L | | 05/15/23 12:00 | 5 | 1.0 | 05/22/23 16:50 | JMW | EPA 6020A |
| Lithium | < 0.020 | mg/L | | 05/15/23 12:00 | 1 | 0.020 | 05/16/23 10:42 | TJJ | EPA 6010B |

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## ANALYTICAL RESULTS

**Sample:** GE02767-05
**Name:** G54L
**Matrix:** Ground Water - Grab

**Sampled:** 05/12/23 12:20
**Received:** 05/12/23 14:31

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Anions - PIA** | | | | | | | | | |
| Chloride | 33 | mg/L | | 05/13/23 05:33 | 10 | 10 | 05/13/23 05:33 | CRD | EPA 300.0 REV 2.1 |
| Sulfate | 120 | mg/L | | 05/25/23 15:55 | 25 | 25 | 05/25/23 15:55 | CRD | EPA 300.0 REV 2.1 |
| **Field - PIA** | | | | | | | | | |
| Depth, From Measuring Point | 22.4 | Feet | | 05/12/23 12:20 | 1 | | 05/12/23 12:20 | FIELD | Field* |
| Dissolved oxygen, Field | 1.0 | mg/L | | 05/12/23 12:20 | 1 | | 05/12/23 12:20 | FIELD | Field* |
| Oxidation Reduction Potential | -37.5 | mV | | 05/12/23 12:20 | 1 | -500 | 05/12/23 12:20 | FIELD | Field* |
| pH, Field Measured | 6.54 | pH Units | | 05/12/23 12:20 | 1 | | 05/12/23 12:20 | FIELD | Field* |
| Specific Conductance, Field Measured | 1505 | umhos/cm | | 05/12/23 12:20 | 1 | | 05/12/23 12:20 | FIELD | Field* |
| Temperature, Field Measured | 20.4 | °C | | 05/12/23 12:20 | 1 | | 05/12/23 12:20 | FIELD | Field* |
| Temperature, Field Measured | 68.7 | °F | | 05/12/23 12:20 | 1 | | 05/12/23 12:20 | FIELD | Field* |
| Turbidity, Field Measured | 130 | NTU | | 05/12/23 12:20 | 1 | 0.00 | 05/12/23 12:20 | FIELD | Field* |
| **General Chemistry - PIA** | | | | | | | | | |
| Alkalinity - bicarbonate as CaCO3 | 690 | mg/L | | 05/23/23 10:23 | 1 | 10 | 05/23/23 10:23 | CPS | SM 2320B 1997* |
| Alkalinity - carbonate as CaCO3 | < 10 | mg/L | | 05/23/23 10:23 | 1 | 10 | 05/23/23 10:23 | CPS | SM 2320B 1997* |
| Fluoride | < 0.250 | mg/L | | 05/24/23 11:14 | 1 | 0.250 | 05/24/23 11:14 | TTH | SM 4500F C 1997 |
| **Soluble General Chemistry - PIA** | | | | | | | | | |
| Solids - total dissolved solids (TDS) | 520 | mg/L | | 05/18/23 17:03 | 1 | 26 | 05/18/23 17:42 | HRF | SM 2540C |
| **Total Metals - PIA** | | | | | | | | | |
| Antimony | < 3.0 | ug/L | | 05/16/23 09:02 | 5 | 3.0 | 05/19/23 11:39 | JMW | EPA 6020A |
| Arsenic | 2.5 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:39 | JMW | EPA 6020A |
| Barium | 210 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:39 | JMW | EPA 6020A |
| Beryllium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:39 | JMW | EPA 6020A |
| Boron | 95 | ug/L | | 05/16/23 09:02 | 5 | 10 | 05/19/23 11:39 | JMW | EPA 6020A |
| Cadmium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:39 | JMW | EPA 6020A |
| Calcium | 190 | mg/L | | 05/16/23 09:02 | 5 | 0.20 | 05/19/23 11:39 | JMW | EPA 6020A |
| Chromium | < 4.0 | ug/L | | 05/16/23 09:02 | 5 | 4.0 | 05/19/23 11:39 | JMW | EPA 6020A |
| Cobalt | < 2.0 | ug/L | | 05/16/23 09:02 | 5 | 2.0 | 05/19/23 11:39 | JMW | EPA 6020A |
| Lead | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:39 | JMW | EPA 6020A |
| Magnesium | 91 | mg/L | | 05/16/23 09:02 | 5 | 0.10 | 05/19/23 11:39 | JMW | EPA 6020A |
| Mercury | < 0.20 | ug/L | | 05/16/23 09:02 | 5 | 0.20 | 05/19/23 11:39 | JMW | EPA 6020A |
| Molybdenum | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:39 | JMW | EPA 6020A |

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## ANALYTICAL RESULTS

**Sample:** GE02767-05
**Name:** G54L
**Matrix:** Ground Water - Grab

**Sampled:** 05/12/23 12:20
**Received:** 05/12/23 14:31

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | 0.45 | mg/L | | 05/16/23 09:02 | 5 | 0.10 | 05/19/23 11:39 | JMW | EPA 6020A |
| Selenium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:39 | JMW | EPA 6020A |
| Sodium | 17 | mg/L | | 05/16/23 09:02 | 5 | 0.10 | 05/19/23 11:39 | JMW | EPA 6020A |
| Thallium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:39 | JMW | EPA 6020A |
| Lithium | < 0.020 | mg/L | | 05/16/23 09:02 | 1 | 0.020 | 05/16/23 12:36 | TJJ | EPA 6010B |

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## ANALYTICAL RESULTS

**Sample:** GE02767-06
**Name:** G54S
**Matrix:** Ground Water - Grab

**Sampled:** 05/12/23 13:04
**Received:** 05/12/23 14:31

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Anions - PIA** | | | | | | | | | |
| Chloride | < 5.0 | mg/L | | 05/25/23 16:16 | 5 | 5.0 | 05/25/23 16:16 | CRD | EPA 300.0 REV 2.1 |
| Sulfate | 31 | mg/L | | 05/13/23 06:10 | 10 | 10 | 05/13/23 06:10 | CRD | EPA 300.0 REV 2.1 |
| **Field - PIA** | | | | | | | | | |
| Depth, From Measuring Point | 23.4 | Feet | | 05/12/23 13:04 | 1 | | 05/12/23 13:04 | FIELD | Field* |
| Dissolved oxygen, Field | 1.2 | mg/L | | 05/12/23 13:04 | 1 | | 05/12/23 13:04 | FIELD | Field* |
| Oxidation Reduction Potential | -30.0 | mV | | 05/12/23 13:04 | 1 | -500 | 05/12/23 13:04 | FIELD | Field* |
| pH, Field Measured | 6.73 | pH Units | | 05/12/23 13:04 | 1 | | 05/12/23 13:04 | FIELD | Field* |
| Specific Conductance, Field Measured | 796.0 | umhos/cm | | 05/12/23 13:04 | 1 | | 05/12/23 13:04 | FIELD | Field* |
| Temperature, Field Measured | 61.4 | °F | | 05/12/23 13:04 | 1 | | 05/12/23 13:04 | FIELD | Field* |
| Temperature, Field Measured | 16.3 | °C | | 05/12/23 13:04 | 1 | | 05/12/23 13:04 | FIELD | Field* |
| Turbidity, Field Measured | 40.5 | NTU | | 05/12/23 13:04 | 1 | 0.00 | 05/12/23 13:04 | FIELD | Field* |
| **General Chemistry - PIA** | | | | | | | | | |
| Alkalinity - bicarbonate as CaCO3 | 500 | mg/L | | 05/23/23 10:23 | 1 | 10 | 05/23/23 10:23 | CPS | SM 2320B 1997* |
| Alkalinity - carbonate as CaCO3 | < 10 | mg/L | | 05/23/23 10:23 | 1 | 10 | 05/23/23 10:23 | CPS | SM 2320B 1997* |
| Fluoride | < 0.250 | mg/L | | 05/24/23 11:16 | 1 | 0.250 | 05/24/23 11:16 | TTH | SM 4500F C 1997 |
| **Soluble General Chemistry - PIA** | | | | | | | | | |
| Solids - total dissolved solids (TDS) | 540 | mg/L | | 05/18/23 17:03 | 1 | 26 | 05/18/23 17:42 | HRF | SM 2540C |
| **Total Metals - PIA** | | | | | | | | | |
| Antimony | < 3.0 | ug/L | | 05/16/23 09:02 | 5 | 3.0 | 05/19/23 11:43 | JMW | EPA 6020A |
| Arsenic | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:43 | JMW | EPA 6020A |
| Barium | 210 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:43 | JMW | EPA 6020A |
| Beryllium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:43 | JMW | EPA 6020A |
| Boron | 62 | ug/L | | 05/16/23 09:02 | 5 | 10 | 05/19/23 11:43 | JMW | EPA 6020A |
| Cadmium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:43 | JMW | EPA 6020A |
| Calcium | 130 | mg/L | | 05/16/23 09:02 | 5 | 0.20 | 05/19/23 11:43 | JMW | EPA 6020A |
| Chromium | < 4.0 | ug/L | | 05/16/23 09:02 | 5 | 4.0 | 05/19/23 11:43 | JMW | EPA 6020A |
| Cobalt | < 2.0 | ug/L | | 05/16/23 09:02 | 5 | 2.0 | 05/19/23 11:43 | JMW | EPA 6020A |
| Lead | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:43 | JMW | EPA 6020A |
| Magnesium | 50 | mg/L | | 05/16/23 09:02 | 5 | 0.10 | 05/19/23 11:43 | JMW | EPA 6020A |
| Mercury | < 0.20 | ug/L | | 05/16/23 09:02 | 5 | 0.20 | 05/19/23 11:43 | JMW | EPA 6020A |
| Molybdenum | 1.1 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:43 | JMW | EPA 6020A |

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## ANALYTICAL RESULTS

**Sample:** GE02767-06
**Name:** G54S
**Matrix:** Ground Water - Grab

**Sampled:** 05/12/23 13:04
**Received:** 05/12/23 14:31

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | 0.74 | mg/L | | 05/16/23 09:02 | 5 | 0.10 | 05/19/23 11:43 | JMW | EPA 6020A |
| Selenium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:43 | JMW | EPA 6020A |
| Sodium | 9.4 | mg/L | | 05/16/23 09:02 | 5 | 0.10 | 05/19/23 11:43 | JMW | EPA 6020A |
| Thallium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:43 | JMW | EPA 6020A |
| Lithium | < 0.020 | mg/L | | 05/16/23 09:02 | 1 | 0.020 | 05/16/23 12:37 | TJJ | EPA 6010B |

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## ANALYTICAL RESULTS

**Sample:** GE02767-07
**Name:** G54S DUP
**Matrix:** Ground Water - Field Duplicate

**Sampled:** 05/12/23 13:04
**Received:** 05/12/23 14:31

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Anions - PIA** | | | | | | | | | |
| Chloride | < 5.0 | mg/L | | 05/25/23 16:59 | 5 | 5.0 | 05/25/23 16:59 | CRD | EPA 300.0 REV 2.1 |
| Sulfate | 30 | mg/L | | 05/13/23 06:48 | 10 | 10 | 05/13/23 06:48 | CRD | EPA 300.0 REV 2.1 |
| **Field - PIA** | | | | | | | | | |
| Depth, From Measuring Point | 23.4 | Feet | | 05/12/23 13:04 | 1 | | 05/12/23 13:04 | FIELD | Field* |
| Dissolved oxygen, Field | 1.2 | mg/L | | 05/12/23 13:04 | 1 | | 05/12/23 13:04 | FIELD | Field* |
| Oxidation Reduction Potential | -30.0 | mV | | 05/12/23 13:04 | 1 | -500 | 05/12/23 13:04 | FIELD | Field* |
| pH, Field Measured | 6.73 | pH Units | | 05/12/23 13:04 | 1 | | 05/12/23 13:04 | FIELD | Field* |
| Specific Conductance, Field Measured | 796.0 | umhos/cm | | 05/12/23 13:04 | 1 | | 05/12/23 13:04 | FIELD | Field* |
| Temperature, Field Measured | 61.4 | °F | | 05/12/23 13:04 | 1 | | 05/12/23 13:04 | FIELD | Field* |
| Temperature, Field Measured | 16.3 | °C | | 05/12/23 13:04 | 1 | | 05/12/23 13:04 | FIELD | Field* |
| Turbidity, Field Measured | 40.5 | NTU | | 05/12/23 13:04 | 1 | 0.00 | 05/12/23 13:04 | FIELD | Field* |
| **General Chemistry - PIA** | | | | | | | | | |
| Alkalinity - bicarbonate as CaCO3 | 480 | mg/L | | 05/23/23 10:23 | 1 | 10 | 05/23/23 10:23 | CPS | SM 2320B 1997* |
| Alkalinity - carbonate as CaCO3 | < 10 | mg/L | | 05/23/23 10:23 | 1 | 10 | 05/23/23 10:23 | CPS | SM 2320B 1997* |
| Fluoride | < 0.250 | mg/L | | 05/24/23 12:07 | 1 | 0.250 | 05/24/23 12:07 | TTH | SM 4500F C 1997 |
| **Soluble General Chemistry - PIA** | | | | | | | | | |
| Solids - total dissolved solids (TDS) | 580 | mg/L | | 05/18/23 17:03 | 1 | 26 | 05/18/23 17:42 | HRF | SM 2540C |
| **Total Metals - PIA** | | | | | | | | | |
| Antimony | < 3.0 | ug/L | | 05/16/23 09:02 | 5 | 3.0 | 05/19/23 11:47 | JMW | EPA 6020A |
| Arsenic | 1.1 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:47 | JMW | EPA 6020A |
| Barium | 210 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:47 | JMW | EPA 6020A |
| Beryllium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:47 | JMW | EPA 6020A |
| Boron | 52 | ug/L | | 05/16/23 09:02 | 5 | 10 | 05/19/23 11:47 | JMW | EPA 6020A |
| Cadmium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:47 | JMW | EPA 6020A |
| Calcium | 130 | mg/L | | 05/16/23 09:02 | 5 | 0.20 | 05/19/23 11:47 | JMW | EPA 6020A |
| Chromium | < 4.0 | ug/L | | 05/16/23 09:02 | 5 | 4.0 | 05/19/23 11:47 | JMW | EPA 6020A |
| Cobalt | < 2.0 | ug/L | | 05/16/23 09:02 | 5 | 2.0 | 05/19/23 11:47 | JMW | EPA 6020A |
| Lead | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:47 | JMW | EPA 6020A |
| Magnesium | 50 | mg/L | | 05/16/23 09:02 | 5 | 0.10 | 05/19/23 11:47 | JMW | EPA 6020A |
| Mercury | < 0.20 | ug/L | | 05/16/23 09:02 | 5 | 0.20 | 05/19/23 11:47 | JMW | EPA 6020A |
| Molybdenum | 1.1 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:47 | JMW | EPA 6020A |

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## ANALYTICAL RESULTS

**Sample:** GE02767-07
**Name:** G54S DUP
**Matrix:** Ground Water - Field Duplicate

**Sampled:** 05/12/23 13:04
**Received:** 05/12/23 14:31

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | 0.71 | mg/L | | 05/16/23 09:02 | 5 | 0.10 | 05/19/23 11:47 | JMW | EPA 6020A |
| Selenium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:47 | JMW | EPA 6020A |
| Sodium | 9.3 | mg/L | | 05/16/23 09:02 | 5 | 0.10 | 05/19/23 11:47 | JMW | EPA 6020A |
| Thallium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:47 | JMW | EPA 6020A |
| Lithium | < 0.020 | mg/L | | 05/16/23 09:02 | 1 | 0.020 | 05/16/23 12:41 | TJJ | EPA 6010B |

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## ANALYTICAL RESULTS

**Sample:** GE02767-08
**Name:** G60L
**Matrix:** Ground Water - Grab

**Sampled:** 05/12/23 10:48
**Received:** 05/12/23 14:31

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Anions - PIA** | | | | | | | | | |
| Chloride | 11 | mg/L | | 05/13/23 08:03 | 5 | 5.0 | 05/13/23 08:03 | CRD | EPA 300.0 REV 2.1 |
| Sulfate | 160 | mg/L | | 05/13/23 08:22 | 50 | 50 | 05/13/23 08:22 | CRD | EPA 300.0 REV 2.1 |
| **Field - PIA** | | | | | | | | | |
| Depth, From Measuring Point | 12.27 | Feet | | 05/12/23 10:48 | 1 | | 05/12/23 10:48 | FIELD | Field* |
| Dissolved oxygen, Field | 2.4 | mg/L | | 05/12/23 10:48 | 1 | | 05/12/23 10:48 | FIELD | Field* |
| Oxidation Reduction Potential | 242 | mV | | 05/12/23 10:48 | 1 | -500 | 05/12/23 10:48 | FIELD | Field* |
| pH, Field Measured | 5.97 | pH Units | | 05/12/23 10:48 | 1 | | 05/12/23 10:48 | FIELD | Field* |
| Specific Conductance, Field Measured | 720.0 | umhos/cm | | 05/12/23 10:48 | 1 | | 05/12/23 10:48 | FIELD | Field* |
| Temperature, Field Measured | 56.6 | °F | | 05/12/23 10:48 | 1 | | 05/12/23 10:48 | FIELD | Field* |
| Temperature, Field Measured | 13.7 | °C | | 05/12/23 10:48 | 1 | | 05/12/23 10:48 | FIELD | Field* |
| Turbidity, Field Measured | 15.4 | NTU | | 05/12/23 10:48 | 1 | 0.00 | 05/12/23 10:48 | FIELD | Field* |
| **General Chemistry - PIA** | | | | | | | | | |
| Alkalinity - bicarbonate as CaCO3 | 300 | mg/L | | 05/23/23 10:23 | 1 | 10 | 05/23/23 10:23 | CPS | SM 2320B 1997* |
| Alkalinity - carbonate as CaCO3 | < 10 | mg/L | | 05/23/23 10:23 | 1 | 10 | 05/23/23 10:23 | CPS | SM 2320B 1997* |
| Fluoride | < 0.250 | mg/L | | 05/24/23 12:28 | 1 | 0.250 | 05/24/23 12:28 | TTH | SM 4500F C 1997 |
| **Soluble General Chemistry - PIA** | | | | | | | | | |
| Solids - total dissolved solids (TDS) | 510 | mg/L | | 05/18/23 17:03 | 1 | 26 | 05/18/23 17:42 | HRF | SM 2540C |
| **Total Metals - PIA** | | | | | | | | | |
| Antimony | < 3.0 | ug/L | | 05/16/23 09:02 | 5 | 3.0 | 05/19/23 11:51 | JMW | EPA 6020A |
| Arsenic | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:51 | JMW | EPA 6020A |
| Barium | 18 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:51 | JMW | EPA 6020A |
| Beryllium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:51 | JMW | EPA 6020A |
| Boron | 42 | ug/L | | 05/16/23 09:02 | 5 | 10 | 05/19/23 11:51 | JMW | EPA 6020A |
| Cadmium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:51 | JMW | EPA 6020A |
| Calcium | 100 | mg/L | | 05/16/23 09:02 | 5 | 0.20 | 05/19/23 11:51 | JMW | EPA 6020A |
| Chromium | < 4.0 | ug/L | | 05/16/23 09:02 | 5 | 4.0 | 05/19/23 11:51 | JMW | EPA 6020A |
| Cobalt | 3.0 | ug/L | | 05/16/23 09:02 | 5 | 2.0 | 05/19/23 11:51 | JMW | EPA 6020A |
| Lead | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:51 | JMW | EPA 6020A |
| Magnesium | 40 | mg/L | | 05/16/23 09:02 | 5 | 0.10 | 05/19/23 11:51 | JMW | EPA 6020A |
| Mercury | < 0.20 | ug/L | | 05/16/23 09:02 | 5 | 0.20 | 05/19/23 11:51 | JMW | EPA 6020A |
| Molybdenum | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:51 | JMW | EPA 6020A |

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## ANALYTICAL RESULTS

**Sample:** GE02767-08
**Name:** G60L
**Matrix:** Ground Water - Grab

**Sampled:** 05/12/23 10:48
**Received:** 05/12/23 14:31

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | 0.33 | mg/L | | 05/16/23 09:02 | 5 | 0.10 | 05/19/23 11:51 | JMW | EPA 6020A |
| Selenium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:51 | JMW | EPA 6020A |
| Sodium | 33 | mg/L | | 05/16/23 09:02 | 5 | 0.10 | 05/19/23 11:51 | JMW | EPA 6020A |
| Thallium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:51 | JMW | EPA 6020A |
| Lithium | < 0.020 | mg/L | | 05/16/23 09:02 | 1 | 0.020 | 05/16/23 12:42 | TJJ | EPA 6010B |

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## ANALYTICAL RESULTS

**Sample:** GE02767-09
**Name:** G60S
**Matrix:** Ground Water - Grab

**Sampled:** 05/12/23 11:00
**Received:** 05/12/23 14:31

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Anions - PIA** | | | | | | | | | |
| Chloride | 7.0 | mg/L | | 05/30/23 17:14 | 5 | 5.0 | 05/30/23 17:14 | CRD | EPA 300.0 REV 2.1 |
| Fluoride | < 0.250 | mg/L | | 05/26/23 04:44 | 1 | 0.250 | 05/26/23 04:44 | CRD | EPA 300.0 REV 2.1 |
| Sulfate | 68 | mg/L | | 05/26/23 05:05 | 25 | 25 | 05/26/23 05:05 | CRD | EPA 300.0 REV 2.1 |
| **Field - PIA** | | | | | | | | | |
| Depth, From Measuring Point | 25.28 | Feet | | 05/12/23 11:00 | 1 | | 05/12/23 11:00 | FIELD | Field* |
| Dissolved oxygen, Field | 1.2 | mg/L | | 05/12/23 11:00 | 1 | | 05/12/23 11:00 | FIELD | Field* |
| Oxidation Reduction Potential | -21.7 | mV | | 05/12/23 11:00 | 1 | -500 | 05/12/23 11:00 | FIELD | Field* |
| pH, Field Measured | 6.81 | pH Units | | 05/12/23 11:00 | 1 | | 05/12/23 11:00 | FIELD | Field* |
| Specific Conductance, Field Measured | 955.6 | umhos/cm | | 05/12/23 11:00 | 1 | | 05/12/23 11:00 | FIELD | Field* |
| Temperature, Field Measured | 63.7 | °F | | 05/12/23 11:00 | 1 | | 05/12/23 11:00 | FIELD | Field* |
| Temperature, Field Measured | 17.6 | °C | | 05/12/23 11:00 | 1 | | 05/12/23 11:00 | FIELD | Field* |
| Turbidity, Field Measured | >1000 | NTU | | 05/12/23 11:00 | 1 | 0.00 | 05/12/23 11:00 | FIELD | Field* |
| **General Chemistry - PIA** | | | | | | | | | |
| Alkalinity - bicarbonate as CaCO3 | 480 | mg/L | | 05/23/23 10:23 | 1 | 10 | 05/23/23 10:23 | CPS | SM 2320B 1997* |
| Alkalinity - carbonate as CaCO3 | < 10 | mg/L | | 05/23/23 10:23 | 1 | 10 | 05/23/23 10:23 | CPS | SM 2320B 1997* |
| **Soluble General Chemistry - PIA** | | | | | | | | | |
| Solids - total dissolved solids (TDS) | 600 | mg/L | | 05/18/23 17:03 | 1 | 26 | 05/18/23 17:42 | HRF | SM 2540C |
| **Total Metals - PIA** | | | | | | | | | |
| Antimony | < 3.0 | ug/L | | 05/16/23 09:02 | 5 | 3.0 | 05/19/23 11:54 | JMW | EPA 6020A |
| Arsenic | 3.7 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:54 | JMW | EPA 6020A |
| Barium | 160 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:54 | JMW | EPA 6020A |
| Beryllium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:54 | JMW | EPA 6020A |
| Boron | 30 | ug/L | | 05/16/23 09:02 | 5 | 10 | 05/19/23 11:54 | JMW | EPA 6020A |
| Cadmium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:54 | JMW | EPA 6020A |
| Calcium | 140 | mg/L | | 05/16/23 09:02 | 5 | 0.20 | 05/19/23 11:54 | JMW | EPA 6020A |
| Chromium | 5.7 | ug/L | | 05/16/23 09:02 | 5 | 4.0 | 05/19/23 11:54 | JMW | EPA 6020A |
| Cobalt | < 2.0 | ug/L | | 05/16/23 09:02 | 5 | 2.0 | 05/19/23 11:54 | JMW | EPA 6020A |
| Lead | 3.1 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:54 | JMW | EPA 6020A |
| Magnesium | 53 | mg/L | | 05/16/23 09:02 | 5 | 0.10 | 05/19/23 11:54 | JMW | EPA 6020A |
| Mercury | < 0.20 | ug/L | | 05/16/23 09:02 | 5 | 0.20 | 05/19/23 11:54 | JMW | EPA 6020A |
| Molybdenum | 1.2 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:54 | JMW | EPA 6020A |

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## ANALYTICAL RESULTS

**Sample:** GE02767-09
**Name:** G60S
**Matrix:** Ground Water - Grab

**Sampled:** 05/12/23 11:00
**Received:** 05/12/23 14:31

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | 0.98 | mg/L | | 05/16/23 09:02 | 5 | 0.10 | 05/19/23 11:54 | JMW | EPA 6020A |
| Selenium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:54 | JMW | EPA 6020A |
| Sodium | 13 | mg/L | | 05/16/23 09:02 | 5 | 0.10 | 05/19/23 11:54 | JMW | EPA 6020A |
| Thallium | < 1.0 | ug/L | | 05/16/23 09:02 | 5 | 1.0 | 05/19/23 11:54 | JMW | EPA 6020A |
| Lithium | < 0.020 | mg/L | | 05/16/23 09:02 | 1 | 0.020 | 05/16/23 12:43 | TJJ | EPA 6010B |

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## ANALYTICAL RESULTS

**Sample:** GE02997-02
**Name:** G02S
**Matrix:** Ground Water - Grab

**Sampled:** 05/15/23 15:18
**Received:** 05/16/23 06:50

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Anions - PIA** | | | | | | | | | |
| Chloride | 2.6 | mg/L | | 05/16/23 11:09 | 1 | 1.0 | 05/16/23 11:09 | CRD | EPA 300.0 REV 2.1 |
| Fluoride | 0.282 | mg/L | | 05/16/23 11:09 | 1 | 0.250 | 05/16/23 11:09 | CRD | EPA 300.0 REV 2.1 |
| Sulfate | < 1.0 | mg/L | | 05/16/23 11:09 | 1 | 1.0 | 05/16/23 11:09 | CRD | EPA 300.0 REV 2.1 |
| **Field - PIA** | | | | | | | | | |
| Depth, From Measuring Point | 7.79 | Feet | | 05/15/23 15:18 | 1 | | 05/15/23 15:18 | FIELD | Field* |
| Dissolved oxygen, Field | 4.1 | mg/L | | 05/15/23 15:18 | 1 | | 05/15/23 15:18 | FIELD | Field* |
| Oxidation Reduction Potential | -104 | mV | | 05/15/23 15:18 | 1 | -500 | 05/15/23 15:18 | FIELD | Field* |
| pH, Field Measured | 6.85 | pH Units | | 05/15/23 15:18 | 1 | | 05/15/23 15:18 | FIELD | Field* |
| Specific Conductance, Field Measured | 640.0 | umhos/cm | | 05/15/23 15:18 | 1 | | 05/15/23 15:18 | FIELD | Field* |
| Temperature, Field Measured | 14.3 | °C | | 05/15/23 15:18 | 1 | | 05/15/23 15:18 | FIELD | Field* |
| Temperature, Field Measured | 57.8 | °F | | 05/15/23 15:18 | 1 | | 05/15/23 15:18 | FIELD | Field* |
| Turbidity, Field Measured | 19.5 | NTU | | 05/15/23 15:18 | 1 | 0.00 | 05/15/23 15:18 | FIELD | Field* |
| **General Chemistry - PIA** | | | | | | | | | |
| Alkalinity - bicarbonate as CaCO3 | 420 | mg/L | | 05/24/23 09:25 | 1 | 10 | 05/24/23 09:25 | CPS | SM 2320B 1997* |
| Alkalinity - carbonate as CaCO3 | < 10 | mg/L | | 05/24/23 09:25 | 1 | 10 | 05/24/23 09:25 | CPS | SM 2320B 1997* |
| **Soluble General Chemistry - PIA** | | | | | | | | | |
| Solids - total dissolved solids (TDS) | 430 | mg/L | | 05/19/23 12:22 | 1 | 26 | 05/19/23 13:18 | HRF | SM 2540C |
| **Total Metals - PIA** | | | | | | | | | |
| Antimony | < 3.0 | ug/L | | 05/22/23 09:08 | 5 | 3.0 | 05/24/23 13:26 | JMW | EPA 6020A |
| Arsenic | 6.6 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:15 | JMW | EPA 6020A |
| Barium | 180 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/24/23 13:26 | JMW | EPA 6020A |
| Beryllium | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:15 | JMW | EPA 6020A |
| Boron | 64 | ug/L | | 05/22/23 09:08 | 5 | 10 | 05/24/23 13:26 | JMW | EPA 6020A |
| Cadmium | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:15 | JMW | EPA 6020A |
| Calcium | 96 | mg/L | | 05/22/23 09:08 | 5 | 0.20 | 05/23/23 21:15 | JMW | EPA 6020A |
| Chromium | < 4.0 | ug/L | | 05/22/23 09:08 | 5 | 4.0 | 05/23/23 21:15 | JMW | EPA 6020A |
| Cobalt | < 2.0 | ug/L | | 05/22/23 09:08 | 5 | 2.0 | 05/23/23 21:15 | JMW | EPA 6020A |
| Lead | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/24/23 13:26 | JMW | EPA 6020A |
| Magnesium | 37 | mg/L | | 05/22/23 09:08 | 5 | 0.10 | 05/23/23 21:15 | JMW | EPA 6020A |
| Mercury | < 0.20 | ug/L | | 05/22/23 09:08 | 5 | 0.20 | 05/24/23 13:26 | JMW | EPA 6020A |
| Molybdenum | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:15 | JMW | EPA 6020A |

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## ANALYTICAL RESULTS

**Sample:** GE02997-02
**Name:** G02S
**Matrix:** Ground Water - Grab

**Sampled:** 05/15/23 15:18
**Received:** 05/16/23 06:50

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | 0.70 | mg/L | | 05/22/23 09:08 | 5 | 0.10 | 05/24/23 13:26 | JMW | EPA 6020A |
| Selenium | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:15 | JMW | EPA 6020A |
| Sodium | 14 | mg/L | | 05/22/23 09:08 | 5 | 0.10 | 05/24/23 13:26 | JMW | EPA 6020A |
| Thallium | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/24/23 13:26 | JMW | EPA 6020A |
| Lithium | < 0.020 | mg/L | | 05/22/23 09:08 | 1 | 0.020 | 05/23/23 09:57 | TJJ | EPA 6010B |

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## ANALYTICAL RESULTS

**Sample:** GE02997-03
**Name:** G50S
**Matrix:** Ground Water - Grab

**Sampled:** 05/15/23 12:56
**Received:** 05/16/23 06:50

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Anions - PIA** | | | | | | | | | |
| Chloride | 9.5 | mg/L | | 05/16/23 12:03 | 5 | 5.0 | 05/16/23 12:03 | CRD | EPA 300.0 REV 2.1 |
| Fluoride | < 0.250 | mg/L | | 05/16/23 11:45 | 1 | 0.250 | 05/16/23 11:45 | CRD | EPA 300.0 REV 2.1 |
| Sulfate | 40 | mg/L | | 05/16/23 12:03 | 5 | 5.0 | 05/16/23 12:03 | CRD | EPA 300.0 REV 2.1 |
| **Field - PIA** | | | | | | | | | |
| Depth, From Measuring Point | 12.1 | Feet | | 05/15/23 12:56 | 1 | | 05/15/23 12:56 | FIELD | Field* |
| Dissolved oxygen, Field | 6.8 | mg/L | | 05/15/23 12:56 | 1 | | 05/15/23 12:56 | FIELD | Field* |
| Oxidation Reduction Potential | -103 | mV | | 05/15/23 12:56 | 1 | -500 | 05/15/23 12:56 | FIELD | Field* |
| pH, Field Measured | 7.26 | pH Units | | 05/15/23 12:56 | 1 | | 05/15/23 12:56 | FIELD | Field* |
| Specific Conductance, Field Measured | 561.0 | umhos/cm | | 05/15/23 12:56 | 1 | | 05/15/23 12:56 | FIELD | Field* |
| Temperature, Field Measured | 57.4 | °F | | 05/15/23 12:56 | 1 | | 05/15/23 12:56 | FIELD | Field* |
| Temperature, Field Measured | 14.1 | °C | | 05/15/23 12:56 | 1 | | 05/15/23 12:56 | FIELD | Field* |
| Turbidity, Field Measured | 66.7 | NTU | | 05/15/23 12:56 | 1 | 0.00 | 05/15/23 12:56 | FIELD | Field* |
| **General Chemistry - PIA** | | | | | | | | | |
| Alkalinity - bicarbonate as CaCO3 | 460 | mg/L | | 05/24/23 09:25 | 1 | 10 | 05/24/23 09:25 | CPS | SM 2320B 1997* |
| Alkalinity - carbonate as CaCO3 | < 10 | mg/L | | 05/24/23 09:25 | 1 | 10 | 05/24/23 09:25 | CPS | SM 2320B 1997* |
| **Soluble General Chemistry - PIA** | | | | | | | | | |
| Solids - total dissolved solids (TDS) | 380 | mg/L | | 05/19/23 12:22 | 1 | 26 | 05/19/23 13:18 | HRF | SM 2540C |
| **Total Metals - PIA** | | | | | | | | | |
| Antimony | < 3.0 | ug/L | | 05/22/23 09:08 | 5 | 3.0 | 05/24/23 13:29 | JMW | EPA 6020A |
| Arsenic | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:19 | JMW | EPA 6020A |
| Barium | 65 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/24/23 13:29 | JMW | EPA 6020A |
| Beryllium | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:19 | JMW | EPA 6020A |
| Boron | 30 | ug/L | | 05/22/23 09:08 | 5 | 10 | 05/24/23 13:29 | JMW | EPA 6020A |
| Cadmium | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:19 | JMW | EPA 6020A |
| Calcium | 90 | mg/L | | 05/22/23 09:08 | 5 | 0.20 | 05/23/23 21:19 | JMW | EPA 6020A |
| Chromium | < 4.0 | ug/L | | 05/22/23 09:08 | 5 | 4.0 | 05/23/23 21:19 | JMW | EPA 6020A |
| Cobalt | < 2.0 | ug/L | | 05/22/23 09:08 | 5 | 2.0 | 05/23/23 21:19 | JMW | EPA 6020A |
| Lead | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/24/23 13:29 | JMW | EPA 6020A |
| Magnesium | 37 | mg/L | | 05/22/23 09:08 | 5 | 0.10 | 05/23/23 21:19 | JMW | EPA 6020A |
| Mercury | < 0.20 | ug/L | | 05/22/23 09:08 | 5 | 0.20 | 05/24/23 13:29 | JMW | EPA 6020A |
| Molybdenum | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:19 | JMW | EPA 6020A |

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## ANALYTICAL RESULTS

**Sample:** GE02997-03
**Name:** G50S
**Matrix:** Ground Water - Grab

**Sampled:** 05/15/23 12:56
**Received:** 05/16/23 06:50

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | 0.35 | mg/L | | 05/22/23 09:08 | 5 | 0.10 | 05/24/23 13:29 | JMW | EPA 6020A |
| Selenium | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:19 | JMW | EPA 6020A |
| Sodium | 9.0 | mg/L | | 05/22/23 09:08 | 5 | 0.10 | 05/24/23 13:29 | JMW | EPA 6020A |
| Thallium | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/24/23 13:29 | JMW | EPA 6020A |
| Lithium | < 0.020 | mg/L | | 05/22/23 09:08 | 1 | 0.020 | 05/23/23 09:58 | TJJ | EPA 6010B |

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## ANALYTICAL RESULTS

**Sample:** GE02997-04
**Name:** G51S
**Matrix:** Ground Water - Grab

**Sampled:** 05/15/23 11:26
**Received:** 05/16/23 06:50

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Anions - PIA** | | | | | | | | | |
| Chloride | 12 | mg/L | | 05/16/23 12:40 | 10 | 10 | 05/16/23 12:40 | CRD | EPA 300.0 REV 2.1 |
| Fluoride | < 0.250 | mg/L | | 05/16/23 12:21 | 1 | 0.250 | 05/16/23 12:21 | CRD | EPA 300.0 REV 2.1 |
| Sulfate | 56 | mg/L | | 05/16/23 12:40 | 10 | 10 | 05/16/23 12:40 | CRD | EPA 300.0 REV 2.1 |
| **Field - PIA** | | | | | | | | | |
| Depth, From Measuring Point | 9.95 | Feet | | 05/15/23 11:26 | 1 | | 05/15/23 11:26 | FIELD | Field* |
| Dissolved oxygen, Field | 1.3 | mg/L | | 05/15/23 11:26 | 1 | | 05/15/23 11:26 | FIELD | Field* |
| Oxidation Reduction Potential | -53.0 | mV | | 05/15/23 11:26 | 1 | -500 | 05/15/23 11:26 | FIELD | Field* |
| pH, Field Measured | 7.12 | pH Units | | 05/15/23 11:26 | 1 | | 05/15/23 11:26 | FIELD | Field* |
| Specific Conductance, Field Measured | 600.0 | umhos/cm | | 05/15/23 11:26 | 1 | | 05/15/23 11:26 | FIELD | Field* |
| Temperature, Field Measured | 13.6 | °C | | 05/15/23 11:26 | 1 | | 05/15/23 11:26 | FIELD | Field* |
| Temperature, Field Measured | 56.6 | °F | | 05/15/23 11:26 | 1 | | 05/15/23 11:26 | FIELD | Field* |
| Turbidity, Field Measured | 430 | NTU | | 05/15/23 11:26 | 1 | 0.00 | 05/15/23 11:26 | FIELD | Field* |
| **General Chemistry - PIA** | | | | | | | | | |
| Alkalinity - bicarbonate as CaCO3 | 290 | mg/L | | 05/24/23 09:25 | 1 | 10 | 05/24/23 09:25 | CPS | SM 2320B 1997* |
| Alkalinity - carbonate as CaCO3 | < 10 | mg/L | | 05/24/23 09:25 | 1 | 10 | 05/24/23 09:25 | CPS | SM 2320B 1997* |
| **Soluble General Chemistry - PIA** | | | | | | | | | |
| Solids - total dissolved solids (TDS) | 430 | mg/L | | 05/19/23 12:22 | 1 | 26 | 05/19/23 13:18 | HRF | SM 2540C |
| **Total Metals - PIA** | | | | | | | | | |
| Antimony | < 3.0 | ug/L | | 05/22/23 09:08 | 5 | 3.0 | 05/24/23 13:33 | JMW | EPA 6020A |
| Arsenic | 5.4 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:23 | JMW | EPA 6020A |
| Barium | 100 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/24/23 13:33 | JMW | EPA 6020A |
| Beryllium | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:23 | JMW | EPA 6020A |
| Boron | 21 | ug/L | | 05/22/23 09:08 | 5 | 10 | 05/24/23 13:33 | JMW | EPA 6020A |
| Cadmium | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:23 | JMW | EPA 6020A |
| Calcium | 98 | mg/L | | 05/22/23 09:08 | 5 | 0.20 | 05/23/23 21:23 | JMW | EPA 6020A |
| Chromium | < 4.0 | ug/L | | 05/22/23 09:08 | 5 | 4.0 | 05/23/23 21:23 | JMW | EPA 6020A |
| Cobalt | < 2.0 | ug/L | | 05/22/23 09:08 | 5 | 2.0 | 05/23/23 21:23 | JMW | EPA 6020A |
| Lead | 2.1 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/24/23 13:33 | JMW | EPA 6020A |
| Magnesium | 41 | mg/L | | 05/22/23 09:08 | 5 | 0.10 | 05/23/23 21:23 | JMW | EPA 6020A |
| Mercury | < 0.20 | ug/L | | 05/22/23 09:08 | 5 | 0.20 | 05/24/23 13:33 | JMW | EPA 6020A |
| Molybdenum | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:23 | JMW | EPA 6020A |

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## ANALYTICAL RESULTS

**Sample:** GE02997-04
**Name:** G51S
**Matrix:** Ground Water - Grab

**Sampled:** 05/15/23 11:26
**Received:** 05/16/23 06:50

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | 0.29 | mg/L | | 05/22/23 09:08 | 5 | 0.10 | 05/24/23 13:33 | JMW | EPA 6020A |
| Selenium | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:23 | JMW | EPA 6020A |
| Sodium | 7.3 | mg/L | | 05/22/23 09:08 | 5 | 0.10 | 05/24/23 13:33 | JMW | EPA 6020A |
| Thallium | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/24/23 13:33 | JMW | EPA 6020A |
| Lithium | < 0.020 | mg/L | | 05/22/23 09:08 | 1 | 0.020 | 05/23/23 10:01 | TJJ | EPA 6010B |

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## ANALYTICAL RESULTS

**Sample:** GE02997-08
**Name:** G64L
**Matrix:** Ground Water - Grab

**Sampled:** 05/15/23 15:00
**Received:** 05/16/23 06:50

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Anions - PIA** | | | | | | | | | |
| Chloride | 2.8 | mg/L | | 05/16/23 14:10 | 1 | 1.0 | 05/16/23 14:10 | CRD | EPA 300.0 REV 2.1 |
| Fluoride | < 0.250 | mg/L | | 05/16/23 14:10 | 1 | 0.250 | 05/16/23 14:10 | CRD | EPA 300.0 REV 2.1 |
| Sulfate | 69 | mg/L | | 05/16/23 14:46 | 50 | 50 | 05/16/23 14:46 | CRD | EPA 300.0 REV 2.1 |
| **Field - PIA** | | | | | | | | | |
| Depth, From Measuring Point | 21.17 | Feet | | 05/15/23 15:00 | 1 | | 05/15/23 15:00 | FIELD | Field* |
| Dissolved oxygen, Field | 3.9 | mg/L | | 05/15/23 15:00 | 1 | | 05/15/23 15:00 | FIELD | Field* |
| Oxidation Reduction Potential | 133 | mV | | 05/15/23 15:00 | 1 | -500 | 05/15/23 15:00 | FIELD | Field* |
| pH, Field Measured | 6.99 | pH Units | | 05/15/23 15:00 | 1 | | 05/15/23 15:00 | FIELD | Field* |
| Specific Conductance, Field Measured | 958.0 | umhos/cm | | 05/15/23 15:00 | 1 | | 05/15/23 15:00 | FIELD | Field* |
| Temperature, Field Measured | 61.0 | °F | | 05/15/23 15:00 | 1 | | 05/15/23 15:00 | FIELD | Field* |
| Temperature, Field Measured | 16.1 | °C | | 05/15/23 15:00 | 1 | | 05/15/23 15:00 | FIELD | Field* |
| Turbidity, Field Measured | 259 | NTU | | 05/15/23 15:00 | 1 | 0.00 | 05/15/23 15:00 | FIELD | Field* |
| **General Chemistry - PIA** | | | | | | | | | |
| Alkalinity - bicarbonate as CaCO3 | 480 | mg/L | | 05/24/23 09:25 | 1 | 10 | 05/24/23 09:25 | CPS | SM 2320B 1997* |
| Alkalinity - carbonate as CaCO3 | < 10 | mg/L | | 05/24/23 09:25 | 1 | 10 | 05/24/23 09:25 | CPS | SM 2320B 1997* |
| **Soluble General Chemistry - PIA** | | | | | | | | | |
| Solids - total dissolved solids (TDS) | 600 | mg/L | | 05/19/23 12:22 | 1 | 26 | 05/19/23 13:18 | HRF | SM 2540C |
| **Total Metals - PIA** | | | | | | | | | |
| Antimony | < 3.0 | ug/L | | 05/22/23 09:08 | 5 | 3.0 | 05/24/23 14:00 | JMW | EPA 6020A |
| Arsenic | 1.6 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:46 | JMW | EPA 6020A |
| Barium | 100 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/24/23 14:00 | JMW | EPA 6020A |
| Beryllium | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:46 | JMW | EPA 6020A |
| Boron | 31 | ug/L | | 05/22/23 09:08 | 5 | 10 | 05/24/23 14:00 | JMW | EPA 6020A |
| Cadmium | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:46 | JMW | EPA 6020A |
| Calcium | 110 | mg/L | | 05/22/23 09:08 | 5 | 0.20 | 05/23/23 21:46 | JMW | EPA 6020A |
| Chromium | 7.4 | ug/L | | 05/22/23 09:08 | 5 | 4.0 | 05/23/23 21:46 | JMW | EPA 6020A |
| Cobalt | < 2.0 | ug/L | | 05/22/23 09:08 | 5 | 2.0 | 05/23/23 21:46 | JMW | EPA 6020A |
| Lead | 2.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/24/23 14:00 | JMW | EPA 6020A |
| Magnesium | 65 | mg/L | | 05/22/23 09:08 | 5 | 0.10 | 05/23/23 21:46 | JMW | EPA 6020A |
| Mercury | < 0.20 | ug/L | | 05/22/23 09:08 | 5 | 0.20 | 05/24/23 14:00 | JMW | EPA 6020A |
| Molybdenum | 1.6 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:46 | JMW | EPA 6020A |

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## ANALYTICAL RESULTS

**Sample:** GE02997-08
**Name:** G64L
**Matrix:** Ground Water - Grab

**Sampled:** 05/15/23 15:00
**Received:** 05/16/23 06:50

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | 1.2 | mg/L | | 05/22/23 09:08 | 5 | 0.10 | 05/24/23 14:00 | JMW | EPA 6020A |
| Selenium | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/23/23 21:46 | JMW | EPA 6020A |
| Sodium | 14 | mg/L | | 05/22/23 09:08 | 5 | 0.10 | 05/24/23 14:00 | JMW | EPA 6020A |
| Thallium | < 1.0 | ug/L | | 05/22/23 09:08 | 5 | 1.0 | 05/24/23 14:00 | JMW | EPA 6020A |
| Lithium | < 0.020 | mg/L | | 05/22/23 09:08 | 1 | 0.020 | 05/23/23 10:05 | TJJ | EPA 6010B |

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## QC SAMPLE RESULTS

| Parameter | Result | Unit | Qual | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| ***Batch B333386 - SW 3015 - EPA 6010B*** | | | | | | | | | |
| **Blank (B333386-BLK1)** | | | | Prepared: 05/15/23 Analyzed: 05/16/23 | | | | | |
| Lithium | < 0.020 | mg/L | | | | | | | |
| **LCS (B333386-BS1)** | | | | Prepared: 05/15/23 Analyzed: 05/16/23 | | | | | |
| Lithium | 0.539 | mg/L | | 0.5556 | | 97 | 80-120 | | |
| ***Batch B333386 - SW 3015 - EPA 6020A*** | | | | | | | | | |
| **Blank (B333386-BLK1)** | | | | Prepared: 05/15/23 Analyzed: 05/22/23 | | | | | |
| 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 (B333386-BS1)** | | | | Prepared: 05/15/23 Analyzed: 05/22/23 | | | | | |
| Antimony | 502 | ug/L | | 555.6 | | 90 | 80-120 | | |
| Arsenic | 494 | ug/L | | 555.6 | | 89 | 80-120 | | |
| Barium | 489 | ug/L | | 555.6 | | 88 | 80-120 | | |
| Beryllium | 480 | ug/L | | 555.6 | | 86 | 80-120 | | |
| Boron | 482 | ug/L | | 555.6 | | 87 | 80-120 | | |
| Cadmium | 497 | ug/L | | 555.6 | | 89 | 80-120 | | |
| Calcium | 5.14 | mg/L | | 5.556 | | 93 | 80-120 | | |
| Chromium | 523 | ug/L | | 555.6 | | 94 | 80-120 | | |
| Cobalt | 504 | ug/L | | 555.6 | | 91 | 80-120 | | |
| Lead | 465 | ug/L | | 555.6 | | 84 | 80-120 | | |
| Magnesium | 5.06 | mg/L | | 5.556 | | 91 | 80-120 | | |
| Mercury | 46.0 | ug/L | | 55.56 | | 83 | 80-120 | | |
| Molybdenum | 484 | ug/L | | 555.6 | | 87 | 80-120 | | |
| Potassium | 5.14 | mg/L | | 5.556 | | 93 | 80-120 | | |
| Selenium | 524 | ug/L | | 555.6 | | 94 | 80-120 | | |
| Sodium | 5.11 | mg/L | | 5.556 | | 92 | 80-120 | | |
| Thallium | 487 | ug/L | | 555.6 | | 88 | 80-120 | | |
| ***Batch B333402 - IC No Prep - EPA 300.0 REV 2.1*** | | | | | | | | | |
| **Matrix Spike (B333402-MS3)** | **Sample: GE02632-11** | | | Prepared & Analyzed: 05/12/23 | | | | | |

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## QC SAMPLE RESULTS

| Parameter | Result | Unit | Qual | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| **Matrix Spike (B333402-MS3)** | **Sample: GE02632-11** | | | Prepared & Analyzed: 05/12/23 | | | | | |
| Fluoride | 1.69 | mg/L | | 1.500 | 0.243 | 96 | 80-120 | | |
| Sulfate | 1.00E9 | mg/L | Q4 | 1.500 | 49.0 | NR | 80-120 | | |
| Chloride | < 1.0 | mg/L | Q4 | 1.500 | 16 | NR | 80-120 | | |
| **Matrix Spike Dup (B333402-MSD3)** | **Sample: GE02632-11** | | | Prepared & Analyzed: 05/12/23 | | | | | |
| Chloride | < 1.0 | mg/L | Q4 | 1.500 | 16 | NR | 80-120 | | 20 |
| Fluoride | 1.67 | mg/L | | 1.500 | 0.243 | 95 | 80-120 | 1 | 20 |
| Sulfate | 1.00E9 | mg/L | Q4 | 1.500 | 49.0 | NR | 80-120 | 0 | 20 |
| ***Batch B333464 - SW 3015 - EPA 6010B*** | | | | | | | | | |
| **Blank (B333464-BLK1)** | | | | Prepared & Analyzed: 05/16/23 | | | | | |
| Lithium | < 0.020 | mg/L | | | | | | | |
| **LCS (B333464-BS1)** | | | | Prepared & Analyzed: 05/16/23 | | | | | |
| Lithium | 0.515 | mg/L | | 0.5556 | | 93 | 80-120 | | |
| ***Batch B333464 - SW 3015 - EPA 6020A*** | | | | | | | | | |
| **Blank (B333464-BLK1)** | | | | Prepared: 05/16/23 Analyzed: 05/19/23 | | | | | |
| 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 (B333464-BS1)** | | | | Prepared: 05/16/23 Analyzed: 05/19/23 | | | | | |
| Antimony | 1070 | ug/L | | 1111 | | 96 | 80-120 | | |
| Arsenic | 544 | ug/L | | 555.6 | | 98 | 80-120 | | |
| Barium | 544 | ug/L | | 555.6 | | 98 | 80-120 | | |
| Beryllium | 546 | ug/L | | 555.6 | | 98 | 80-120 | | |
| Boron | 1080 | ug/L | | 1111 | | 97 | 80-120 | | |
| Cadmium | 542 | ug/L | | 555.6 | | 98 | 80-120 | | |
| Calcium | 5.58 | mg/L | | 5.556 | | 101 | 80-120 | | |
| Chromium | 564 | ug/L | | 555.6 | | 102 | 80-120 | | |
| Cobalt | 559 | ug/L | | 555.6 | | 101 | 80-120 | | |
| Lead | 499 | ug/L | | 555.6 | | 90 | 80-120 | | |
| Magnesium | 5.39 | mg/L | | 5.556 | | 97 | 80-120 | | |
| Mercury | 53.4 | ug/L | | 55.56 | | 96 | 80-120 | | |
| Molybdenum | 528 | ug/L | | 555.6 | | 95 | 80-120 | | |

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## QC SAMPLE RESULTS

| Parameter | Result | Unit | Qual | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| **LCS (B333464-BS1)** | | | | Prepared: 05/16/23 Analyzed: 05/19/23 | | | | | |
| Potassium | 5.55 | mg/L | | 5.556 | | 100 | 80-120 | | |
| Selenium | 542 | ug/L | | 555.6 | | 97 | 80-120 | | |
| Sodium | 5.65 | mg/L | | 5.556 | | 102 | 80-120 | | |
| Thallium | 549 | ug/L | | 555.6 | | 99 | 80-120 | | |
| ***Batch B333806 - No Prep - SM 2540C*** | | | | | | | | | |
| **Blank (B333806-BLK1)** | | | | Prepared & Analyzed: 05/18/23 | | | | | |
| Solids - total dissolved solids (TDS) | < 17 | mg/L | | | | | | | |
| **LCS (B333806-BS1)** | | | | Prepared & Analyzed: 05/18/23 | | | | | |
| Solids - total dissolved solids (TDS) | 983 | mg/L | | 1000 | | 98 | 84.9-109 | | |
| **Duplicate (B333806-DUP2)** | **Sample: GE02632-11** | | | Prepared & Analyzed: 05/18/23 | | | | | |
| Solids - total dissolved solids (TDS) | 235 | mg/L | M | | 890 | | | 116 | 5 |
| ***Batch B333818 - No Prep - SM 2540C*** | | | | | | | | | |
| **Blank (B333818-BLK1)** | | | | Prepared & Analyzed: 05/18/23 | | | | | |
| Solids - total dissolved solids (TDS) | < 17 | mg/L | | | | | | | |
| **LCS (B333818-BS1)** | | | | Prepared & Analyzed: 05/18/23 | | | | | |
| Solids - total dissolved solids (TDS) | 923 | mg/L | | 1000 | | 92 | 84.9-109 | | |
| **Duplicate (B333818-DUP2)** | **Sample: GE02767-09** | | | Prepared & Analyzed: 05/18/23 | | | | | |
| Solids - total dissolved solids (TDS) | 625 | mg/L | | | 605 | | | 3 | 5 |
| ***Batch B333887 - No Prep - SM 2540C*** | | | | | | | | | |
| **Blank (B333887-BLK1)** | | | | Prepared & Analyzed: 05/19/23 | | | | | |
| Solids - total dissolved solids (TDS) | < 17 | mg/L | | | | | | | |
| **LCS (B333887-BS1)** | | | | Prepared & Analyzed: 05/19/23 | | | | | |
| Solids - total dissolved solids (TDS) | 940 | mg/L | | 1000 | | 94 | 84.9-109 | | |
| ***Batch B333977 - SW 3015 - EPA 6010B*** | | | | | | | | | |
| **Blank (B333977-BLK1)** | | | | Prepared: 05/22/23 Analyzed: 05/23/23 | | | | | |
| Lithium | < 0.020 | mg/L | | | | | | | |
| **LCS (B333977-BS1)** | | | | Prepared: 05/22/23 Analyzed: 05/23/23 | | | | | |
| Lithium | 0.551 | mg/L | | 0.5556 | | 99 | 80-120 | | |
| ***Batch B333977 - SW 3015 - EPA 6020A*** | | | | | | | | | |
| **Blank (B333977-BLK1)** | | | | Prepared: 05/22/23 Analyzed: 05/24/23 | | | | | |
| 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 | | | | | | | |

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## QC SAMPLE RESULTS

| Parameter | Result | Unit | Qual | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| **Blank (B333977-BLK1)** | | | | Prepared: 05/22/23 Analyzed: 05/23/23 | | | | | |
| Molybdenum | < 1.0 | ug/L | | | | | | | |
| Potassium | < 0.10 | mg/L | Ba | | | | | | |
| Selenium | < 1.0 | ug/L | | | | | | | |
| Sodium | 0.126 | mg/L | B | | | | | | |
| Thallium | < 1.0 | ug/L | | | | | | | |
| **LCS (B333977-BS1)** | | | | Prepared: 05/22/23 Analyzed: 05/24/23 | | | | | |
| Antimony | 538 | ug/L | | 555.6 | | 97 | 80-120 | | |
| Arsenic | 542 | ug/L | | 555.6 | | 98 | 80-120 | | |
| Barium | 531 | ug/L | | 555.6 | | 96 | 80-120 | | |
| Beryllium | 538 | ug/L | | 555.6 | | 97 | 80-120 | | |
| Boron | 548 | ug/L | | 555.6 | | 99 | 80-120 | | |
| Cadmium | 536 | ug/L | | 555.6 | | 97 | 80-120 | | |
| Calcium | 5.48 | mg/L | | 5.556 | | 99 | 80-120 | | |
| Chromium | 545 | ug/L | | 555.6 | | 98 | 80-120 | | |
| Cobalt | 531 | ug/L | | 555.6 | | 96 | 80-120 | | |
| Lead | 545 | ug/L | | 555.6 | | 98 | 80-120 | | |
| Magnesium | 5.66 | mg/L | | 5.556 | | 102 | 80-120 | | |
| Mercury | 51.8 | ug/L | | 55.56 | | 93 | 80-120 | | |
| Molybdenum | 521 | ug/L | | 555.6 | | 94 | 80-120 | | |
| Potassium | 5.59 | mg/L | | 5.556 | | 101 | 80-120 | | |
| Selenium | 545 | ug/L | | 555.6 | | 98 | 80-120 | | |
| Sodium | 5.59 | mg/L | | 5.556 | | 101 | 80-120 | | |
| Thallium | 528 | ug/L | | 555.6 | | 95 | 80-120 | | |
| ***Batch B334050 - No Prep - SM 2320B 1997*** | | | | | | | | | |
| **Duplicate (B334050-DUP2)** | **Sample: GE02632-11** | | | Prepared & Analyzed: 05/22/23 | | | | | |
| Alkalinity - bicarbonate as CaCO3 | 775 | mg/L | | | 762 | | | 2 | 10 |
| Alkalinity - carbonate as CaCO3 | < 10 | mg/L | | | ND | | | | 10 |
| **Duplicate (B334050-DUP4)** | **Sample: GE02632-14** | | | Prepared & Analyzed: 05/22/23 | | | | | |
| Alkalinity - carbonate as CaCO3 | < 10 | mg/L | | | ND | | | | 10 |
| Alkalinity - bicarbonate as CaCO3 | 412 | mg/L | | | 412 | | | 0 | 10 |

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## 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**

| | |
|---|---|
| B | Present in the method blank at 126 ug/L. |
| Ba | Present in the method blank at 232 ug/L. |
| M | Analyte failed to meet the required acceptance criteria for duplicate analysis. |
| 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. |

Gail J Schindler

Certified by: Gail Schindler, Project Manager

GEO2632
VMW 5-12-23

# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 9

DC-845203

**Section A** Required Client Information:

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| 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: | Jason Stuckey |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER

UST RCRA OTHER

Site Location STATE: IL

**Section D** Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_BA01 | WT | G | 5/11/23 | 1333 | | 11 | X | X | X | | | | | | | | | | | | | | | | | | | |
| 2 | DC_BA02 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_BA02!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_BA03 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_BA03!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_BA04 | WT | G | 5/11/23 | 1146 | | 11 | X | X | X | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_BA05# | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_BA06 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G02!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G02#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G02&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G03!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G04!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G06!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_G06#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_G07!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME |
|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | | 5/11/23 | 1720 | | | |
| | | | | Grace Jackson | 5/11/23 | 17:20 |

| SAMPLE CONDITIONS | | | |
|---|---|---|---|
| Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
| 9 | | / | |
| 5 | / | | / |

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Harold Pemberton

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 05/11/23

CHAIN-OF-CUSTODY / Analytical Request Document

GEO2632
VMW5-12-23

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



ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

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

REGULATORY AGENCY: NPDES GROUND WATER DRINKING WATER UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

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

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Requested Analysis Filtered (Y/N) | Analysis Test (Y/N) | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_G08!L | WT | G | 5/11/23 | 1451 | | 5 | X | X | X | | X | | | | | | | | | | | | | | | | | | |
| 2 | DC_G09!L | WT | G | 5/11/23 | 1355 | | 5 | X | X | X | | X | | | | | | | | | | | | | | | | | | |
| 3 | DC_G12!L +DUP | WT | G | 5/11/23 | 1200 | | 10 | X | X | X | | X | | | | | | | | | | | | | | | | | | |
| 4 | DC_G12#S | WT | G | 5/11/23 | 1225 | | 1 | X | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_G14!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_G15!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_G16!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_G50!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G50#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G51!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G51#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G52!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G52#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G53!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_G53#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_G54!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | | 5/11/23 | 1720 | | | | 2 | | 2 | |
| | | | | | 5/11/23 | 17:20 | 5 | X | | 5 |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jason Pemberton
SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 05/11/23

## CHAIN-OF-CUSTODY / Analytical Request Document

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

GW0262SL
VMW 5-123

Page: 3 of 9

**Section A** Required Client Information:

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| 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: | Jason Stuckey |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

**Section D** Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_G54#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_G55!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_G55#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_G56!L DUP | WT | G | 5/11/23 | 1109 | | 8 | X | X | X | | | | | | | | | | | | | | | | | |
| 5 | DC_G56#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_G57!L | WT | G | 5/11/23 | 1158 | | 4 | X | X | X | | | | | | | | | | | | | | | | | |
| 7 | DC_G57#S | WT | G | 5/11/23 | 1522 | | 12 | X | X | X | | | | | | | | | | | | | | | | | |
| 8 | DC_G58!L | WT | G | 5/11/23 | 1258 | | 4 | X | X | X | | | | | | | | | | | | | | | | | |
| 9 | DC_G58#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G59!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G59#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G60!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G60#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G61#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_G62!L | WT | G | 5/11/23 | 1358 | | 4 | X | X | X | | | | | | | | | | | | | | | | | |
| 16 | DC_G63!L | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | | 5/11/23 | 1720 | | | | 5 | | 2 | |
| | | | | Grace Jones | 5/11/23 | 17:20 | 5 | Y | | Y |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Brian Pemberton
SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 5/11/23

35

## CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Section B Section C

Page: 4 of 9

GE02632
VMW 5-12-23

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

**Required** Client Information:

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| | |
| Email To: | Brian.Voelker@VistraCorp.com |
| Phone: (217) 753-8911 | Fax: |
| **Requested Due Date/TAT:** | **10 day** |

**Required** Project Information:

| | |
|---|---|
| Report To: | Brian Voelker |
| Copy To: | Jason Stuckey |
| | |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

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

**Site Location** — **STATE:** IL

**Section D** — **Required** Client Information

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

**Valid Matrix Codes**

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

**Requested Analysis Filtered (Y/N)**

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Y/N: Analysis Test ↓ | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_G63#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_G64!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_G64#S | WT | G | 5/11/23 | 1511 | | 12 | X | X | X | | | | | | | | | | | | | | | | | | | |
| 4 | DC_G65!L | WT | G | 5/11/23 | 1251 | | 4 | X | X | X | | | | | | | | | | | | | | | | | | | |
| 5 | DC_G65#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_G66!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_G66#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_G67!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G67#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G70!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G71!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G71#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G72!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G73!L | WT | G | 5/11/23 | 1205 | | 10 | X | X | X | | | | | | | | | | | | | | | | | | | |
| 15 | DC_L103 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_OM01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME |
|---|---|---|---|---|---|---|
| **DC-23Q2-Rev 0** | | 5/11/23 | 1720 | | | |
| | | | | grace Jackson | 5/11/23 | 17:20 |

**SAMPLE CONDITIONS**

| Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|
| 5 | Y | | Y |
| 5 | Y | | Y |

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: Barbara Richardson

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 05/11/23

## 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:

UE02632
VMW5-12-23

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

| | | | |
|---|---|---|---|
| Email To: Brian.Voelker@VistraCorp.com | Purchase Order No.: | Address: see Section A | NPDES GROUND WATER DRINKING WATER<br>UST RCRA OTHER |
| Phone: (217) 753-8911 Fax: | Project Name: | Quote Reference: / Project Manager: | Site Location STATE: IL |
| Requested Due Date/TAT: 10 day | Project Number: 2285 | Profile #: | |

**Section D** Required Client Information

**Valid Matrix Codes**

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

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

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Y/N ↓ Analysis Test ↓ DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_P01!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_P01#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_P01$I | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_P02#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_P04#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_P05!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_P05#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_P05&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_P36!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_P36#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_P36&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_P37!L | WT | G | 5/11/23 | 1258 | | 2 | X | | X | | | | | | | | | | | | | | | | | | |
| 13 | DC_P37&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_P38!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_P38#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_P39!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | | 5/11/23 | 1720 | | | | 9 | | / | |
| | | | | grace | 5/11/23 | 17:20 | 5.9 | / | | / |

**SAMPLER NAME AND SIGNATURE**
PRINT Name of SAMPLER: Aaron Pemberton
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 05/11/23

## 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: |
|---|---|---|
| Company: Vistra Corp | Report To: Brian Voelker | Attention: Jason Stuckey |
| Address: 13498 E. 900th St | Copy To: Jason Stuckey | Company Name: Vistra Corp |
| | | Address: see Section A |

**REGULATORY AGENCY**
NPDES GROUND WATER DRINKING WATER

UE02632
JMW 5-12-23

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

| | | | | | |
|---|---|---|---|---|---|
| Email To: Brian.Voelker@VistraCorp.com | | Purchase Order No.: | Quote Reference: | UST | RCRA OTHER |
| Phone: (217) 753-8911 | Fax: | Project Name: | Project Manager: | Site Location STATE: | IL |
| Requested Due Date/TAT: 10 day | | Project Number: 2285 | Profile #: | | |

**Section D** Required Client Information

**Valid Matrix Codes**

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

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

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Requested Analysis Filtered (Y/N) Y/N | Analysis Test | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_P39#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_P39&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_P40!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_P40#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_P41!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_P41#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_P41&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_P42!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_P42#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_P42&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_R10!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_R11!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_R13!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_R61!L | WT | G | 5/11/23 | 1651 | | 10 | X | X | X | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_R72#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_T43!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | | 5/11/23 | 1720 | | | | 5 | | 2 | |
| | | | | grace | 5/11/23 | 17:20 | 6 | Y | | Y |

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: Aaron Rembecher

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 05/11/23

## CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 9 of 9

**Section A** Required Client Information:

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| | |
| Email To: | Brian.Voelker@VistraCorp.com |

**Section B** Required Project Information:

| | |
|---|---|
| Report To: | Brian Voelker |
| Copy To: | Jason Stuckey |
| | |
| Purchase Order No.: | |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

UE02632
VMW 5-12-23

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

| Phone: (217) 753-8911 | Fax: | Project Name: | Project Manager: | Site Location STATE: | IL | |
|---|---|---|---|---|---|---|
| Requested Due Date/TAT: 10 day | | Project Number: 2285 | Profile #: | | | |

**Section D** Required Client Information

**Valid Matrix Codes**

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

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

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Y/N | Analysis Test: DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | Requested Analysis Filtered (Y/N) | | | | | | | | | | | | | |
| 1 | DC_T44!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_T45!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_T46!L | WT | G | 5/11/23 | 1525 | | 2 | X | | X | | | | | | | | | | | | | | | | | | | |
| 4 | DC_X301_leachate | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | EB-4 | | | 5/11/23 | 1600 | | 12 | X | X | X | | | | | | | | | | | | | | | | | | | |
| 6 | EB-5 | | | 5/11/23 | 1605 | | 10 | X | X | X | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | | 5/11/23 | 1720 | | | | 9 | | 2 | |
| | | | | grace Jones | 5/11/23 | 17:20 | 6 | Y | | Y |

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: Haden Humberston

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 05/11/23

# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 9

**Section A** Required Client Information:

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| 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: | Jason Stuckey |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

GE027697

**Section D** Required Client Information

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

**Valid Matrix Codes**

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Y/N | Analysis Test: DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_BA01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_BA02 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_BA02!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_BA03 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_BA03!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_BA04 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_BA05# | | | 5/12/23 | 1050 | | 11 | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_BA06 | | | 5/12/23 | 1219 | | 12 | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G02!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G02#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G02&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G03!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G04!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | 05-31-23 DC_G06!L +EDUP | | | 5/12/23 | 1205 | | 8 | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_G06#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_G07!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME |
|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 5/12/23 | 1431 | | | |
| | | | | grace | 5/12/23 | 14:31 |

| SAMPLE CONDITIONS | | | |
|---|---|---|---|
| Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
| 8 | Y | N | Y |

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joe Reed

SIGNATURE of SAMPLER: Joseph R Reed DATE Signed (MM/DD/YY): 5/12/23

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:

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| 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: | Jason Stuckey |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

GE027647 gsg

**Section D** Required Client Information

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

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

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_G08!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_G09!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_G12!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_G12#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_G14!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_G15!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_G16!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_G50!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G50#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G51!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G51#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G52!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G52#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G53!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_G53#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_G54!L | | | 5/12/23 | 1220 | | 12 | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 5/12/23 | 1431 | | | | 2 | | 2 | |
| | | | | grace Jurkovich | 5/12/23 | 14:31 | 2 | Y | | Y |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Joe Reed
SIGNATURE of SAMPLER: Joseph R Reed
DATE Signed (MM/DD/YY): 5/12/23

**CHAIN-OF-CUSTODY / Analytical Request Document**

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

Page: 3 of 9

**Section A** Required Client Information:

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| 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: | Jason Stuckey |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES | GROUND WATER | DRINKING WATER
UST | RCRA | OTHER

Site Location STATE: IL

BE02767 gej

**Section D** Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test ↓ Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_G54#S + FD dup | | | 5/12/23 | 1304 | | 24 | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_G55!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_G55#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_G56!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_G56#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_G57!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_G57#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_G58!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G58#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G59!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G59#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G60!L | | | 5/12/23 | 1048 | | 10 | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G60#S | | | 5/12/23 | 1100 | | 12 | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G61#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_G62!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_G63!L | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS |
|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 5/12/23 | 1431 | grace | 5/12/23 | 14:31 | 6 / 2 / 2 / - |
| | | | | | | | 2 / J / - / 9 |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Joe Reed
SIGNATURE of SAMPLER: Joseph R Reed
DATE Signed (MM/DD/YY): 5/12/23

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

## CHAIN-OF-CUSTODY / Analytical Request Document

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



Section A | Section B | Section C

Page: 4 of 9

| | | | |
|---|---|---|---|
| Email To: Brian.Voelker@VistraCorp.com | Purchase Order No.: | Address: see Section A | NPDES GROUND WATER DRINKING WATER |
| Phone: (217) 753-8911 Fax: | Project Name: | Quote Reference: | UST RCRA OTHER |
| Requested Due Date/TAT: 10 day | Project Number: 2285 | Project Manager: Profile #: | Site Location STATE: IL |

GE027a7 gcf

**Section D** Required Client Information

**Valid Matrix Codes**

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

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

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Requested Analysis Filtered (Y/N) Y/N | Analysis Test ↓ DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_P01!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_P01#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_P01$I | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_P02#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_P04#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_P05!L | | | 5/12/23 | 1030 | | 5 | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_P05#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_P05&D | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_P36!L | | | 5/12/23 | 1241 | | 2 | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_P36#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_P36&D | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_P37!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_P37&D | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_P38!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_P38#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_P39!L | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 5/12/23 | 1431 | | | | 2.2 | | 2 | |
| | | | | gracyJustice | 5/12/23 | 14:31 | 2 | Y | | Y |

**SAMPLER NAME AND SIGNATURE**
PRINT Name of SAMPLER: Joseph R Reed
SIGNATURE of SAMPLER: Joseph R Reed
DATE Signed (MM/DD/YY): 5/12/23

## 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: |
|---|---|---|
| Company: Vistra Corp | Report To: Brian Voelker | Attention: Jason Stuckey |
| Address: 13498 E. 900th St | Copy To: Jason Stuckey | Company Name: Vistra Corp |
| | | Address: see Section A |

**REGULATORY AGENCY**
NPDES GROUND WATER DRINKING WATER

| Phone: (217) 753-8911 | Fax: | Project Name: | Project Manager: | Site Location STATE: | IL | |
|---|---|---|---|---|---|---|
| Requested Due Date/TAT: 10 day | | Project Number: 2285 | Profile #: | | | |

GB027647 gej

| ITEM # | Section D Required Client Information<br>SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE | Valid Matrix Codes MATRIX / CODE: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Y/N | Analysis Test | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_T44!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_T45!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_T46!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_X301_leachate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | EB-6 | | | | 5/10/23 | 1036 | | 5 | | | | | | | | | | | | | | | | | | | | | | |
| 6 | EB-7 | | | | 5/12/23 | 1245 | | 12 | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Requested Analysis Filtered (Y/N)

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 5/12/23 | 14:31 | | | | 2.8 | | 2 | |
| | | | | [signature] | 5/12/23 | 14:31 | 2.8 | Y | | Y |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: J R Reed
SIGNATURE of SAMPLER: Joseph R Reed
DATE Signed (MM/DD/YY): 5/12/23

GE02997
Vmw 5-16-23

# CHAIN-OF-CUSTODY / Analytical Request Document

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



DC-845-203

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND

**Section A** Required Client Information:

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| 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: | Jason Stuckey |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | ~~Jason Stuckey~~ |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

**Section D** Required Client Information

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

**Valid Matrix Codes**

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_BA01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_BA02 | | | 5/15/23 | 1123 | | 11 | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_BA02!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_BA03 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_BA03!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_BA04 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_BA05# | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_BA06 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G02!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G02#S | | | 5/15/23 | 1518 | | 11 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G02&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G03!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G04!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G06!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_G06#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_G07!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 5/15/23 | 1800 | | | | | | | |
| | | | | Vmw | 5-16-23 | 1650 | 0.3 | Y | N | Y |

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: Joe Reed

SIGNATURE of SAMPLER: Joseph R Reed

DATE Signed (MM/DD/YY): 5/15/23



CHAIN-OF-CUSTODY / Analytical Request Document

GE02997
VMW 5-16-23

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



ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT GYPSUM MANAGEMENT FACILITY POND
DC-845-203

**Section A** Required Client Information:

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| 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: | Jason Stuckey |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

**Section D** Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_G08!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_G09!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_G12!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_G12#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_G14!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_G15!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_G16!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_G50!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G50#S | | | 5/15/23 | 1256 | | 12 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G51!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G51#S | | | 5/15/23 | 1126 | | 12 | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G52!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G52#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G53!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_G53#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_G54!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 5/15/23 | 1800 | | | | | | | |
| | | | | | 5-16-23 | 650 | 0.3 | Y | N | Y |
| | | | | | | | Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joe Reed

SIGNATURE of SAMPLER: Joseph R Reed

DATE Signed (MM/DD/YY): 5/15/23

**CHAIN-OF-CUSTODY / Analytical Request Document**

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

GE02997
VMW 5-16-23





**Section A** Required Client Information:

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| 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: | Jason Stuckey |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

**Section D** Required Client Information

**Valid Matrix Codes**

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

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

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_G54#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_G55!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_G55#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_G56!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_G56#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_G57!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_G57#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_G58!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G58#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G59!L | | | 5/15/23 | 1552 | | 16 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G59#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G60!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G60#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G61#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | ~~DC_G62!L~~ FB #8 | | | 5/15/23 | 1750 | | 10 | | | | | | | | | | | | | | | | | | | | | | |
| 16 | ~~DC_G63#L~~ FB #9 | | | 5/15/23 | 1750 | | 12 | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joe Reed | 5/15/23 | 1800 | | | | | | | |
| | | | | | 5-16-23 | 650 | 0.3 | Y | N | Y |

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: Joe Reed

SIGNATURE of SAMPLER: Joe Reed — DATE Signed (MM/DD/YY): 5/15/23

## CHAIN-OF-CUSTODY / Analytical Request Document

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

GEO2997
VMW 5-16-23

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

**Required** Client Information:

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| | |
| Email To: | Brian.Voelker@VistraCorp.com |
| Phone: (217) 753-8911 | Fax: |
| **Requested Due Date/TAT:** | **10 day** |

**Required** Project Information:

| | |
|---|---|
| Report To: | Brian Voelker |
| Copy To: | Jason Stuckey |
| | |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

**Section D** Required Client Information

**Valid Matrix Codes**

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

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

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Y/N | Analysis Test: DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_G63#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_G64!L | | | 5/15/23 | 1500 | | 12 | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_G64#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_G65!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_G65#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_G66!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_G66#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_G67!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G67#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G70!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G71!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G71#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G72!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G73!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_L103 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_OM01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| **DC-23Q2-Rev 0** | Joseph R Read | 5/15/23 | 1800 | | | | | | | |
| | | | | Vanessa Wyman | 5-16-23 | 650 | 0.3 | Y | N | Y |

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: Joe Read

SIGNATURE of SAMPLER: Joseph R Read

DATE Signed (MM/DD/YY): 5/15/23

## 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:

GE02997
Vmw 5-16-23

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT GYPSUM MANAGEMENT FACILITY POND
DC-845-203

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

| ITEM # | Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS | | | | | | | | | | | | | | | Requested Analysis Filtered (Y/N) | | | | | | | | | | | | | |
| 1 | DC_OM04#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_OM05#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_OM07 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_OM08 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_OM09 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_OM10 | | | 5/15/23 | 1314 | | 10 | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_OM12 | | | 5/15/23 | 1405 | | 11 | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_OM15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_OM16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_OM17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_OM21 | | | 5/15/23 | 1324 | | 10 | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_OM22#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_OM22&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_OM23#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_OM23&D | | | 5/15/23 | 1600 | | 10 | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_OM24&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 5/15/23 | 1900 | | | | | | | |
| | | | | Vmw | 5-16-23 | 650 | 0.3 | Y | N | Y |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Joe Reed
SIGNATURE of SAMPLER: Joseph R Reed
DATE Signed (MM/DD/YY): 5/15/23

## 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: |
|---|---|---|
| Company: Vistra Corp | Report To: Brian Voelker | Attention: Jason Stuckey |

GE02997
Vmw 5-16-23

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

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

**Requested Analysis Filtered (Y/N)**

| ITEM # | Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_OM25#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_OM25&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_OR02 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_OR03#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_OR03&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_OR04&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_OR05&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_OR06!A | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_OR11 | | | 5/15/23 | 1233 | | 11 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_OR13#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_OR13&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_OR14#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_OR14&D | | | 5/15/23 | 1135 | | 11 | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_OR18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_OR19 | | | 5/15/23 | 1528 | | 11 | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_OR20 | | | 5/15/23 | 1110 | | 11 | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| **DC-23Q2-Rev 0** | Joe Joseph R Reed | 5/15/23 | 1800 | Vam Wagner | 5-16-23 | 650 | 0.3 | Y | N | Y |

**SAMPLER NAME AND SIGNATURE**
PRINT Name of SAMPLER: Joe Reed
SIGNATURE of SAMPLER: Joseph R Reed
DATE Signed (MM/DD/YY): 5/15/23

## CHAIN-OF-CUSTODY / Analytical Request Document

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

50

| Section A Required Client Information: | Section B Required Project Information: | Section C Invoice Information: |
|---|---|---|
| Company: Vistra Corp | Report To: Brian Voelker | Attention: Jason Stuckey |
| Address: 13498 E. 900th St | Copy To: Jason Stuckey | Company Name: Vistra Corp |



**REGULATORY AGENCY**

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

**Duck Creek**

**WELL/SAMPLE POINT** G02S **Purge Method:** DelCatad Pump

Date: 5-15-23 Start Time: 13:48 Finish/Sample Time: 15:18

| | | | |
|---|---|---|---|
| Well Depth (Bottom) From MP: | 29.06 ft | Min. Purge Volume: | 1.0 Gal / L |
| Depth to Water From MP: | 7.79 ft | Total Purge Volume: | 1.3 Gal / L |
| Water Column Length: | 21.27 ft | Max Drawdown: | Na ft |
| Well Water Volume: | 3.4 Gal / L | Total Drawdown: | 0.99 ft |

14.27

| Reading | Time | Depth | Flow Rate | pH | Spec Cond | Temp | ORP | DO | Turb |
|---|---|---|---|---|---|---|---|---|---|
| (Units) | | ft. | mL/min | s.u. | umhos/cm | deg C | mV | mg/L | NTU |
| 1 | 14:11 | 8.75 | 100 | 6.87 | 649 | ~~14.27~~ | -106 | 4.14 | 22.8 |
| 2 | 14:12 | 8.75 | 100 | 6.85 | 648 | 14.40 | -105 | 4.22 | 19.4 |
| 3 | 14:13 | 8.76 | 100 | 6.85 | 640 | 14.32 | -104 | 4.12 | 19.5 |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| Stabilization | NA | NA | NA | ± 0.2 | ± 3% | ± 0.2 | ± 20 | ± 10% or 0.2 | NA |

Field Meter: HoBa

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) |
| 3 | 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 | 2,5,6 |
| | |

| Filtered | |
|---|---|
| Qty | Bottles |
| 1 | Metals (P,250mL, HNO3) |
| | Ammonia (P,250mL, H2S04) |
| 1 | General (P,500mL) 1000 mL |
| 3 | ToC 40 mL |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

**Final DTW:** 8.78 ft

Comments NA Couldn't connect to well over HoBo connect Dissonant → overrange / got the data after sampling well with SN-21615554

Sampler's Signature:

**Duck Creek**

**WELL/SAMPLE POINT** G50S **Purge Method:** Dedicated Pump

Date: 5-15-23 Start Time: 11:29 Finish/Sample Time: 12:56

| | | | |
|---|---|---|---|
| Well Depth (Bottom) From MP: | 37.30 ft | Min. Purge Volume: | 1.0 Gal / L |
| Depth to Water From MP: | 12.10 ft | Total Purge Volume: | 1.3 Gal / L |
| Water Column Length: | 25.20 ft | Max Drawdown: | NA ft |
| Well Water Volume: | 4.0 Gal / L | Total Drawdown: | 5.14 ft |

| Reading | Time | Depth | Flow Rate | pH | Spec Cond | Temp | ORP | DO | Turb |
|---|---|---|---|---|---|---|---|---|---|
| (Units) | | (ft.) | (mL/min) | (s.u.) | (umhos/cm) | (deg C) | (mV) | (mg/L) | (NTU) |
| 1 | 11:48 | 13:73 | 100 | 7.24 | 573 | 14.27 | -103 | 6.87 | 90.4 |
| 2 | 11:49 | 14:11 | 100 | 7.25 | 562 | 14.15 | -103 | 6.98 | 80.0 |
| 3 | 11:50 | 14:05 | 100 | 7.26 | 561 | 14.09 | -103 | 6.81 | 66.7 |
| 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) |
| 3 | 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 | 2.5, L, HNO3 |
| | |

| Filtered | |
|---|---|
| Qty | Bottles |
| 1 | Metals (P,250mL, HNO3) |
| 1 | Ammonia (P,250mL, H2S04) |
| 1 | General (P, ~~500~~mL) 1000, mL |
| 3 | TOC, 40, mL |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

**Final DTW:** 17.24 ft

Comments NA

Dis iron → 0.194

Sampler's Signature:

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

**Duck Creek**

**WELL/SAMPLE POINT** G51S **Purge Method:** pedicated pump

Date: 5-15-23 Start Time: 10:02 Finish/Sample Time: 11:26

| | | | |
|---|---|---|---|
| Well Depth (Bottom) From MP: | 32.17 ft | Min. Purge Volume: | 1.0 Gal / L |
| Depth to Water From MP: | 09.95 ft | Total Purge Volume: | 1.3 Gal / L |
| Water Column Length: | 22.22 ft | Max Drawdown: | Na ft |
| Well Water Volume: | 3.5 Gal / L | Total Drawdown: | 7.28 ft |

| Reading | Time | Depth | Flow Rate | pH | Spec Cond | Temp | ORP | DO | Turb |
|---|---|---|---|---|---|---|---|---|---|
| (Units) | | (ft.) | (mL/min) | (s.u.) | (umhos/cm) | (deg C) | (mV) | (mg/L) | (NTU) |
| 1 | 10:23 | 12.02 | 100 | 7.14 | 601 | 13.75 | -54 | 1.40 | 556 |
| 2 | 10:24 | 12.02 | 100 | 7.13 | 602 | 13.61 | -54 | 1.33 | 530 |
| 3 | 10:25 | 12.03 | 100 | 7.12 | 600 | 13.64 | -53 | 1.26 | 430 |
| 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) |
| 3 | 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 | 2.5 L, HNO3 |
| | |

| Filtered | |
|---|---|
| Qty | Bottles |
| 1 | Metals (P,250mL, HNO3) |
| 1 | Ammonia (P,250mL, H2S04) |
| 1 | General (P, ~~500~~ mL) 1000 ML |
| 3 | TOC 40 ML |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

**Final DTW:** 17.23 ft

Comments Na

Dis iron => 0.182

Sampler's Signature:

**Duck Creek**

**WELL/SAMPLE POINT** G54L **Purge Method:** Portable Pump

Date: ~~5-11-23~~ 5/12/23 JMD 5/12 Start Time: 11:07 Finish/Sample Time: 1220

| | | | |
|---|---|---|---|
| Well Depth (Bottom) From MP: | 40.30 ft ✓ | Min. Purge Volume: | 1000 Gal / L (mL) |
| Depth to Water From MP: | 22.40 ft | Total Purge Volume: | 1800 Gal / L (mL) |
| Water Column Length: | 17.90 ft | Max Drawdown: | NA ft |
| Well Water Volume: | 10.84 Gal / L | Total Drawdown: | 2.95 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 | 1118 | 24.35 | 100 | 6.54 | 1486.3 | 20.32 | -40.1 | 1.05 | 94.33 |
| 2 | 1119 | 24.37 | 100 | 6.55 | 1495.1 | 20.34 | -38.8 | 1.06 | 106.77 |
| 3 | 1121 | 24.39 | 100 | 6.54 | 1504.9 | 20.37 | -37.5 | 1.04 | 129.58 |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| Stabilization | NA | NA | NA | ± 0.2 | ± 3% | ± 0.2 | ± 20 | ± 10% or 0.2 | NA |

Field Meter: ~~Horiba~~ Aquaread 600 JMD 5/12

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) |
| 3 | 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 | P1000 mL |
| 1 | P 2.5L HNO3 |

| Filtered | |
|---|---|
| Qty | Bottles |
| 1 | Metals (P,250mL, HNO3) |
| 1 | Ammonia (P,250mL, H2S04) |
| | General (P,500mL) |
| 3 | TOC |
| 1 | P 1000 mL |
| | |
| | |
| | |
| | |
| | |
| 3.787 ppm | Soluble Iron ±2 |

**Final DTW:** 25.35 ft

Comments

Sampler's Signature: ~~[signature]~~ JMD 5/12

**Duck Creek**

**WELL/SAMPLE POINT** G54S **Purge Method:** Dedicated Pump

Date: 5-12-23 Start Time: 10:56 Finish/Sample Time: 13:04

| | | | |
|---|---|---|---|
| Well Depth (Bottom) From MP: | 51.26 ft | Min. Purge Volume: | 1.0 Gal / L |
| Depth to Water From MP: | 23.40 ft | Total Purge Volume: | 1.3 Gal / L |
| Water Column Length: | 27.84 ft | Max Drawdown: | Na ft |
| Well Water Volume: | 4.4 Gal / L | Total Drawdown: | 9.40 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 | 11:17 | 25.30 | 100 | 6.82 | 798 | 16.40 | -22 | 1.47 | 49.8 |
| 2 | 11:18 | 25.40 | 100 | 6.76 | 797 | 16.31 | -26 | 1.34 | 44.8 |
| 3 | 11:19 | 25.48 | 100 | 6.73 | 796 | 16.34 | -30 | 1.24 | 40.5 |
| 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) |
| 3+3 | TOC (A,V 40mL, H2SO4) |
| | TOX (A,G 250mL, H2SO4) |
| 1+1 | Metals (P,250mL, HNO3) |
| | Cyanide (P, 250mL, NaOH) |
| | Phenols (A,G,250mL, H2SO4) |
| 1+1 | General (P, ~~250~~ mL) 1000, ML |
| 1+1 | 2.5, L, HNO3 |
| | |

| Filtered | |
|---|---|
| Qty | Bottles |
| 1+1 | Metals (P,250mL, HNO3) |
| 1+1 | Ammonia (P,250mL, H2S04) |
| 1+1 | General (P, ~~500mL~~) 1000, ML |
| 3+3 | TOC, 40, ML |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

**Final DTW:** 32.80 ft

Comments DIS IRON — 2.778
FD was grabbed

Sampler's Signature:

Duck Creek

**WELL/SAMPLE POINT** G57S **Purge Method:** Dedicated pump

Date: 5/11/23 Start Time: 1410 Finish/Sample Time: 1522

| | | | |
|---|---|---|---|
| Well Depth (Bottom) From MP: | 37.40 ft | Min. Purge Volume: | 1000 Gal / L (mL) |
| Depth to Water From MP: | 20.25 ft | Total Purge Volume: | 1500 Gal / L (mL) |
| Water Column Length: | 17.15 ft | Max Drawdown: | ft |
| Well Water Volume: | 10.39 Gal (L) | Total Drawdown: | 0.50 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 | 1421 | 20.75 | 100 | 6.86 | 1289.2 | 17.70 | 124.6 | 2.61 | 50.46 |
| 2 | 1422 | 20.75 | 100 | 6.85 | 1260.2 | 17.74 | 124.7 | 2.58 | 44.15 |
| 3 | 1424 | 20.75 | 100 | 6.87 | 1281.3 | 17.71 | 124.7 | 2.55 | 46.85 |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| Stabilization | NA | NA | NA | ± 0.2 | ± 3% | ± 0.2 | ± 20 | ± 10% or 0.2 | NA |

Field Meter: Aquatroll 600

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) |
| 3 | 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 | P 2.5L HNO3 |
| 1 | P 1000 mL |

| Filtered | |
|---|---|
| Qty | Bottles |
| 1 | Metals (P,250mL, HNO3) |
| 1 | Ammonia (P,250mL, H2S04) |
| | General (P,500mL) |
| 3 | Toc |
| 1 | P 1000 mL |
| | |
| | |
| | |
| | |
| | |
| 0.012 ppm | Soluble Iron+2 |

**Final DTW:** 20.75 ft

Comments

Sampler's Signature:

Duck Creek

**WELL/SAMPLE POINT** G60L **Purge Method:** Dedicated pump

Date: 5-12-23 Start Time: 09:31 Finish/Sample Time: 10:48

| | | | |
|---|---|---|---|
| Well Depth (Bottom) From MP: | 27.00 ft | Min. Purge Volume: | 1.0 Gal / L |
| Depth to Water From MP: | 12.27 ft | Total Purge Volume: | 1 Gal / L |
| Water Column Length: | 14.73 ft | Max Drawdown: | NA ft |
| Well Water Volume: | 2.3 Gal / L | Total Drawdown: | 7.64 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 | 09:45 | 15.30 | 100 | 5.99 | 725 | 13.77 | 262 | 2.66 | 27.1 |
| 2 | 09:46 | 15.30 | 100 | 5.99 | 720 | 13.78 | 254 | 2.59 | 23.0 |
| 3 | 09:47 | 15.32 | 100 | 5.97 | 720 | 13.66 | 242 | 2.45 | 15.4 |
| 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) |
| 3 | 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 | 2.5, L, HNO3 |
| | |

| Filtered | |
|---|---|
| Qty | Bottles |
| 1 | Metals (P,250mL, HNO3) |
| 1 | Ammonia (P,250mL, H2S04) |
| 1 | General (P, ~~500~~mL) 1000 ML |
| 1 | TOC, 40, ML |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Final DTW: 19.91 ft

Comments Dis. Iron ~~Metals~~ = 0.524

Sampler's Signature:

Duck Creek

**WELL/SAMPLE POINT** G60S **Purge Method:** Portable pump

Date: 5/12/23 Start Time: 0930 Finish/Sample Time: 1100

Well Depth (Bottom) From MP: ~~39.20~~ ft 39.47 (3rd 5/12) Min. Purge Volume: 1000 Gal / L (mL)

Depth to Water From MP: 25.28 ft Total Purge Volume: 1800 Gal / L (mL)

Water Column Length: 14.19 ft Max Drawdown: ft

Well Water Volume: 8.59 Gal / L Total Drawdown: 0.70 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 | 1000 | 25.87 | 100 | 6.81 | 953.68 | 17.56 | -20.8 | 1.21 | >1000 |
| 2 | 1001 | 25.88 | 100 | 6.81 | 952.90 | 17.59 | -20.7 | 1.21 | >1000 |
| 3 | 1003 | 25.90 | 100 | 6.81 | 955.61 | 17.61 | -21.7 | 1.20 | >1000 |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| Stabilization | NA | NA | NA | ± 0.2 | ± 3% | ± 0.2 | ± 20 | ± 10% or 0.2 | NA |

Field Meter: Aquatroll 600

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) |
| 3 | 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 | P 1000 mL |
| 1 | P 2.5L HNO3 |

| Filtered | |
|---|---|
| Qty | Bottles |
| 1 | Metals (P,250mL, HNO3) |
| 1 | Ammonia (P,250mL, H2S04) |
| | General (P,500mL) |
| 3 | Toc |
| 1 | P 1000 mL |
| | |
| | |
| | |
| | |
| | |
| 6.506 ppm | Soluble Iron +2 |

**Final DTW:** 25.98 ft

Comments Dedicated bladder pump doesn't work, used portable pump

Sampler's Signature:

**Duck Creek**

**WELL/SAMPLE POINT** G60S **Purge Method:** Portable Pump with Dedicated Tubing

Date: 5/17/2023 Start Time: 0935 Finish/Sample Time: 1027

| | | | |
|---|---|---|---|
| Well Depth (Bottom) From MP: | 39.20 ft | Min. Purge Volume: | 1000 Gal / L (mL) |
| Depth to Water From MP: | 25.40 ft | Total Purge Volume: | 1000 Gal / L (mL) |
| Water Column Length: | 13.80 ft | Max Drawdown: | — ft |
| Well Water Volume: | 8.35 Gal (L) | Total Drawdown: | 1.08 ft |

| Reading | Time | Depth | Flow Rate | pH | Spec Cond | Temp | ORP | DO | Turb |
|---|---|---|---|---|---|---|---|---|---|
| (Units) | | (ft.) | (mL/min) | (s.u.) | (umhos/cm) | (deg C) | (mV) | (mg/L) | (NTU) |
| 1 | 1014 | 26.84 | 100 | 6.70 | 790 | 16.36 | 2 | 1.32 | 71000 |
| 2 | 1016 | 26.84 | 100 | 6.68 | 803 | 16.26 | -6 | 1.24 | 71000 |
| 3 | 1018 | 26.84 | 100 | 6.67 | 805 | 16.24 | -11 | 1.17 | 71000 |
| 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) |
| | Metals (P,250mL, HNO3) |
| | Cyanide (P, 250mL, NaOH) |
| | Phenols (A,G,250mL, H2SO4) |
| | General (P, 250 mL) |
| | |
| | |

| Filtered | |
|---|---|
| Qty | Bottles |
| | Metals (P,250mL, HNO3) |
| | Ammonia (P,250mL, H2S04) |
| 1 | General (P,~~500mL~~) 150mL |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

**Final DTW:** 26.48 ft

Comments Transducer S/N 21615677 Resample
Dedicated pump does not work, had to use portable pump to sample

Sampler's Signature:

**Duck Creek**

**WELL/SAMPLE POINT** G64S **Purge Method:** ~~portable pump~~ KL Dedicated pump

Date: 5-11-23 Start Time: ~~13:37~~ KL 13:45 Finish/Sample Time: 15:11

| | | | |
|---|---|---|---|
| Well Depth (Bottom) From MP: | 39.50 ft | Min. Purge Volume: | 1.0 Gal / L |
| Depth to Water From MP: | 23.26 ~~20.89~~ KL ft | Total Purge Volume: | 1.3 Gal / L |
| Water Column Length: | 16.24 ft | Max Drawdown: | NA ft |
| Well Water Volume: | 2.59 Gal / L | Total Drawdown: | 0.90 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 | 13:59 | 24.11 | 100 | 6.86 | 792 | 16.46 | -37 | 4.87 | 86.1 |
| 2 | 14:00 | 24.15 | 100 | 6.87 | 780 | 16.51 | -36 | 4.78 | 80.8 |
| 3 | 14:01 | 24.11 | 100 | 6.86 | 765 | 16.42 | -33 | 4.63 | 48.5 |
| 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) |
| 3 | 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 | 2.5 L HNO3 |
| | |

| Filtered | |
|---|---|
| Qty | Bottles |
| 1 | Metals (P,250mL, HNO3) |
| 1 | Ammonia (P,250mL, H2S04) |
| 1 | General (P, ~~500mL~~) 100 mL |
| 3 | TOC 40 mL |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

**Final DTW:** 24.16 ft

Comments Metals (Fe+2 diss) → 1.765 Reading

Sampler's Signature:

**Duck Creek**

**WELL/SAMPLE POINT** G64L 1335 **Purge Method:** portable pump with dedicated tubing

Date: ~~5-11-23~~ 5/15/23 Start Time: ~~10:56~~ App 5/15/23 Finish/Sample Time: 1500

Well Depth (Bottom) From MP: ~~30.46~~ ft 30.44 Min. Purge Volume: 1000 Gal / L (mL)

Depth to Water From MP: 21.17 ft Total Purge Volume: 1000 Gal / L (mL)

Water Column Length: 9.27 ft Max Drawdown: — ft

Well Water Volume: 5.61 Gal (L) Total Drawdown: 1.60 ft

App 5/15/23

| Reading | Time | Depth | Flow Rate | pH | Spec Cond | Temp | ORP | DO | Turb |
|---|---|---|---|---|---|---|---|---|---|
| (Units) | | (ft.) | (mL/min) | (s.u.) | (umhos/cm) | (deg C) | (mV) | (mg/L) | (NTU) |
| 1 | 1400 | 22.00 | 100 | 7.02 | 970 | 16.17 | 132 | 3.92 | 280 |
| 2 | 1402 | 22.10 | 100 | 7.00 | 961 | 16.30 | 132 | ~~3.87~~ 3.87 | 299 |
| 3 | 1404 | 22.20 | 100 | 6.99 | 958 | 16.11 | 133 | 3.87 | 259 |
| 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) |
| 3 | 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 | (P,250mL, HNO3) |
| | |

(12)

| Filtered | |
|---|---|
| Qty | Bottles |
| 1 | Metals (P,250mL, HNO3) |
| 1 | Ammonia (P,250mL, H2S04) |
| 1 | General (P, ~~500mL~~) 1000mL |
| 3 | TOC (A, V, 40mL, H2SO4) |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

**Final DTW:** 22.77 ft

Comments Transducer S/N - 21615688 diss Iron** - 0.064 ppm

Sampler's Signature:

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

**Duck Creek**

**WELL/SAMPLE POINT** X301 Pump House **Purge Method:** Bailer

Date: 5-10-23 Start Time: 15:32 Finish/Sample Time: 15 43

| Reading | Time | Depth | Flow Rate | pH | Spec Cond * | Temp | ORP | DO | Turb |
|---|---|---|---|---|---|---|---|---|---|
| (Units) | | (ft.) | (mL/min) | (s.u.) | (umhos/cm) | (deg C) | (mV) | (mg/L) | (NTU) |
| 1 | 15:33 | | | 6.76 | ~~1608~~ | 22.18 | 168 | 11.82 | 0 |
| | | | | | | | | | |
| 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

**BOTTLE INFORMATION:**

| Unfiltered | |
|---|---|
| Qty | Bottles |
| | VOAs (C,V, 40mL, HCL) |
| | VOAS (C,V, 40mL) |
| | Organics (A,G,U 1000mL) |
| | Organics (A,G,U 500mL) |
| 3 | 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 | 2.5 L HNO3 |
| | |

| Filtered | |
|---|---|
| Qty | Bottles |
| 1 | Metals (P,250mL, HNO3) |
| | Ammonia (P,250mL, H2S04) |
| 1 | General (P, ~~500~~mL) 1000 mL |
| 3 | TOC 40 ML |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Comments N/a , *Ne,800 (MS)

Sampler's Signature: [signature]

Duck Creek

**WELL/SAMPLE POINT** X301 Pump House **Purge Method:** bailer

Date: 5/16/2023 Start Time: 1535 Finish/Sample Time: 1539

| Reading | Time | Depth | Flow Rate | pH | Spec Cond | Temp | ORP | DO | Turb |
|---|---|---|---|---|---|---|---|---|---|
| (Units) | | (ft.) | (mL/min) | (s.u.) | (umhos/cm) | (deg C) | (mV) | (mg/L) | (NTU) |
| 1 | 1537 | — | — | 6.79 | 17,100 | 22.75 | 163 | 7.42 | 9.5 |
| | | | | | | | | | |
| 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

**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) 150mL |
| | |
| | |

| Filtered | |
|---|---|
| Qty | Bottles |
| | Metals (P,250mL, HNO3) |
| | Ammonia (P,250mL, H2S04) |
| | General (P,500mL) |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Comments Resample

Sampler's Signature:

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | JD | Location: | Vistra Duck Creek |
| Weather: | C3-78°F sunny wind NE 10mph | Environment: | grass |

| | | | | | |
|---|---|---|---|---|---|
| Multiparameter Water Meter | Make: Horiba | Model: U-5000 | Serial Number: | 04U1FVTF | |
| Water Level Meter | Make: Heron | Model: Dipper-T | Serial Number: | 19FF2202131ML | |

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 3.98 | s.u. | ±0.1 s.u. | Pass | No | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 6.71 | s.u. | ±0.1 s.u. | Fail | Yes | 7.00 | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.05 | s.u. | ±0.1 s.u. | Pass | No | NA | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 18 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 1960 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 234 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.08 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 98.1 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

| ICV (Initial Calibration Verification) | | | | | Time: 1020 | | | |
|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Action Taken? | Manufacturer | Lot# | Exp. |
| pH 4.00b | 4.05 | s.u. | ±0.15 s.u. | pass | NA | Geotech | 2GE870 | Mar-24 |
| pH 7.00b | 6.85 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 9.87 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 979 | µS/cm | ±5% | | | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

| CCV (Continued Calibration Verification): | | | | | Time: 1520 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
| pH 4.00a | 4.10 | s.u. | ±0.1 s.u. | pass | No | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 6.98 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.04 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 1030 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.09 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.00 | NTU | <2 NTU | | | | 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 | L344-09 | 12/14/2023 |
| 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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: | [signature] | Date: | 5/9/23 |

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | Brendan Glennon | Location: | Duck Creek |
| Weather: | 61° Mostly Sunny 8mph WSW | Environment: | Grass Field |

| | | | | | |
|---|---|---|---|---|---|
| Multiparameter Water Meter | Make: AT | Model: 600 | Serial Number: | 762215 | |
| Water Level Meter | Make: Heron | Model: 200ft. | Serial Number: | 19FF2111192HB | |

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 4.10 | s.u. | ±0.1 s.u. | P | N | N/A | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 6.98 | s.u. | ±0.1 s.u. | 〃 | 〃 | 〃 | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.05 | s.u. | ±0.1 s.u. | 〃 | 〃 | 〃 | MSI | M082-04 | 3/25/2024 |
| SC ~~Zero (DI)~~ 1000 | 2,332.1 | µS/cm | 0<25 µS/cm | F | Y | 2009.5 | Pace Labs | N/A (DI) | N/A (DI) |
| SC ~~2000~~ zero(DI) | 12.21 | µS/cm | ±5% | P | N | N/A | Geotech | 2GE1442 | May-23 |
| ORP | 238.2 | mV | ±15 mV | 〃 | 〃 | 〃 | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.06 | mg/L | ±0.1 | 〃 | 〃 | 〃 | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 99.01 | % | 97-100% | 〃 | 〃 | 〃 | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0.11 | NTU | <2 NTU | 〃 | 〃 | 〃 | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

| ICV (Initial Calibration Verification) | | | | | Time: 0910 | | | |
|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Action Taken? | Manufacturer | Lot# | Exp. |
| pH 4.00b | 4.10 | s.u. | ±0.15 s.u. | P | N | Geotech | 2GE870 | Mar-24 |
| pH 7.00b | 6.90 | s.u. | ±0.15 s.u. | 〃 | 〃 | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 9.97 | s.u. | ±0.15 s.u. | 〃 | 〃 | Geotech | 2GE820 | May-24 |
| SC 1000 | 1038.2 | µS/cm | ±5% | — | — | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

| CCV (Continued Calibration Verification): | | | | | Time: 1516 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
| pH 4.00a | 4.00 | s.u. | ±0.1 s.u. | P | N | N/A | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.00 | s.u. | ±0.1 s.u. | 〃 | 〃 | 〃 | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 9.95 | s.u. | ±0.1 s.u. | 〃 | 〃 | 〃 | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 1020.4 | µS/cm | ±5% | 〃 | 〃 | 〃 | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.01 | mg/L | ±0.1 mg/L | 〃 | 〃 | 〃 | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.41 | NTU | <2 NTU | — | — | — | 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 | L344-09 | 12/14/2023 |
| 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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: | Brendan Glennon | Date: | 5/9/23 |

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | Kyle Lamm | Location: | Duck Creek |
| Weather: | 54° to 77° sunny | Environment: | Dry |
| Multiparameter Water Meter | Make: Horiba | Model: U-5000 | Serial Number: PW2GYJD3 |
| Water Level Meter | Make: Heron | Model: Water tape | Serial Number: 11FF220930SML |

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 4.00 | s.u. | ±0.1 s.u. | P | NA | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.01 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 9.96 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 20.00 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 2,030 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 214 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.05 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 99.10 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 1.00 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

| ICV (Initial Calibration Verification) | | | | | Time: 09:34 | | | |
|---|---|---|---|---|---|---|---|---|
| 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 | 2GE870 | Mar-24 |
| pH 7.00b | 6.99 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 9.92 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 1040 | µS/cm | ±5% | | | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

| CCV (Continued Calibration Verification): | | | | | Time: NA | | | |
|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
| pH 4.00a | | s.u. | ±0.1 s.u. | | | | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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) |

Approx. every 4 hrs, unless only one well

| CCV (Continued Calibration Verification): | | | | | Time: 15:38 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
| 4.00a | 4.04 | s.u. | ±0.1 s.u. | P | NA | NA | MSI | L344-09 | 12/14/2023 |
| 7.00a | 6.91 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | 9.96 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 1,030 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.00 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 1.10 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Comments: NA

| Signature: | | Date: | 5-9-2023 |
|---|---|---|---|

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | Aaron Richardson | Location: | Duck creek |
| Weather: | 67°-78° Windy Sunny 5kts 9mph | Environment: | grass, dirt, trees |

| | | | | | |
|---|---|---|---|---|---|
| Multiparameter Water Meter | Make: AT | Model: 600 | Serial Number: | 762193 | |
| Water Level Meter | Make: Heron | Model: Dipper T | Serial Number: | 3717-T | |

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 4.08 | s.u. | ±0.1 s.u. | P | No | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.01 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.01 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 19.63 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 1995 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 224.6 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.09 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 99.87 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0.00 | NTU | <2 NTU | ✓ | | | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

234 @ 21°C

| ICV (Initial Calibration Verification) | | | | | Time: 0942 | | | |
|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Action Taken? | Manufacturer | Lot# | Exp. |
| pH 4.00b | 4.00 | s.u. | ±0.15 s.u. | P | NA | Geotech | 2GE870 | Mar-24 |
| pH 7.00b | 6.83 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 10.61 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 1005.2 | µS/cm | ±5% | ✓ | | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

| CCV (Continued Calibration Verification): | | | | | Time: 1539 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 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 | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.00 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.06 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 1001.7 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.00 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.00 | NTU | <2 NTU | ✓ | | | 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 | L344-09 | 12/14/2023 |
| 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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: | 5/10/2023 |
|---|---|---|---|

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | Brendan Calenson | Location: | Duck Creek |
| Weather: | 64° Mostly Cloudy 8mph NW | Environment: | Grass Field |
| Multiparameter Water Meter | Make: AT | Model: 600 | Serial Number: 762215 |
| Water Level Meter | Make: Heron | Model: 200 ft. | Serial Number: 19FF2111 92HB |

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 3.93 | s.u. | ±0.1 s.u. | P | N | N/A | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 6.96 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 9.97 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 16.21 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 1916.5 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 234.6 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.10 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 98.81 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0.00 | NTU | <2 NTU | — | — | — | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

| ICV (Initial Calibration Verification) | | | | | Time: 0910 | | | |
|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Action Taken? | Manufacturer | Lot# | Exp. |
| pH 4.00b | 3.89 | s.u. | ±0.15 s.u. | P | N | Geotech | 2GE870 | Mar-24 |
| pH 7.00b | 6.86 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 9.85 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 993.41 | µS/cm | ±5% | — | — | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

| CCV (Continued Calibration Verification): | | | | | Time: 1500 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
| pH 4.00a | 3.97 | s.u. | ±0.1 s.u. | P | N | N/A | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 6.96 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 9.91 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 1016.21 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.10 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | — | — | — | 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 | L344-09 | 12/14/2023 |
| 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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: | Brendan Calenson | Date: | 5/10/23 |

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | JD | Location: | Vistra Duck Creek |
| Weather: | 70-79° F Sunny wind ESE 9-16 mph | Environment: | woods |

| | | | | | |
|---|---|---|---|---|---|
| Multiparameter Water Meter | Make: Horiba | Model: U-5000 | Serial Number: | V4U1FVTF | |
| Water Level Meter | Make: Heron | Model: Dipper-T | Serial Number: | 19FF2202131ML | |

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 4.01 | s.u. | ±0.1 s.u. | pass | No | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 6.91 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 9.98 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 9 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 2090 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 232 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.08 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 98.28 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 18 | NTU | <2 NTU | Fail | Yes | 0.0 | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification) — Time: 1021

| Buffer | Check Value | Units | Range | Pass/Fail | Action Taken? | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|
| pH 4.00b | 3.99 | s.u. | ±0.15 s.u. | pass | NA | Geotech | 2GE870 | Mar-24 |
| pH 7.00b | 6.98 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 9.92 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 798 | µS/cm | ±5% | Fail | calibrate | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification): — Time: 1550

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 4.16 | s.u. | ±0.1 s.u. | pass | No | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.03 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 9.98 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 1040 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.09 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.00 | NTU | <2 NTU | | | | 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 | L344-09 | 12/14/2023 |
| 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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: | [signature] | Date: | 5/10/23 |

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | KYLE LANE | Location: | DUCK CREEK |
| Weather: | 55° to 81° SUNNY | Environment: | DRY |
| Multiparameter Water Meter | Make: HORIBA | Model: U-5000 | Serial Number: YL9KJ9HA |
| Water Level Meter | Make: HERON | Model: WATER TAPE | Serial Number: 11FF2209305ML |

| 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/A | N/A | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.01 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 9.98 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 10.60 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 2,010 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 218 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.84 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 99.40 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification) — Time: 10:04

| 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 | 2GE870 | Mar-24 |
| pH 7.00b | 6.91 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 9.87 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 1030 | µS/cm | ±5% | | | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification): — Time: N/A

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | | s.u. | ±0.1 s.u. | | | | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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) |

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification): — Time: 15:48

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| 4.00a | 4.02 | s.u. | ±0.1 s.u. | P | N/A | N/A | MSI | L344-09 | 12/14/2023 |
| 7.00a | 6.93 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | 9.98 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 1060 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.07 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.58 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Comments:

| | | | |
|---|---|---|---|
| Signature: | [signature] | Date: | 5-10-2023 |

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | Joe Reed | Location: | Duck Creek |
| Weather: | | Environment: | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Multiparameter Water Meter | Make: | Hor.ba | Model: | U-5000 | Serial Number: | PW2GYJD3 | |
| Water Level Meter | Make: | Solinst | Model: | 101 | Serial Number: | P7/LM2 | |

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 4.00 | s.u. | ±0.1 s.u. | P | N | | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 6.98 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 9.99 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 0.0 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 2010 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 239 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.05 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 98.7 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0.1 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

## ICV (Initial Calibration Verification)

Time: 1000

| Buffer | Check Value | Units | Range | Pass/Fail | Action Taken? | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|
| pH 4.00b | 4.01 | s.u. | ±0.15 s.u. | P | N | Geotech | 2GE870 | Mar-24 |
| pH 7.00b | 6.99 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 9.95 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 990 | µS/cm | ±5% | | | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

## CCV (Continued Calibration Verification):

Time: 1509

| 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 | | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.00 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 9.94 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 1020 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.05 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | 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 | L344-09 | 12/14/2023 |
| 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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: | Joseph R Reed | Date: | 7/10/23 |

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | Aaron Pemberton | Location: | Duck creek |
| Weather: | 73°-79°F Sunny Wind SE 6mph | Environment: | grass, dirt, |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Multiparameter Water Meter | Make: | Horiba | Model: | U 5000 | Serial Number: | UHUIFVTF | |
| Water Level Meter | Make: | Heron | Model: | Dipper T | Serial Number: | 19FF2111192HB | |

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 4.00 | s.u. | ±0.1 s.u. | P | NO | N/A | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.01 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.00 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 18 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 2000 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 238 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.09 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 109.8 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

234 @ 21°C

| ICV (Initial Calibration Verification) | | | | | Time: 0945 | | | |
|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Action Taken? | Manufacturer | Lot# | Exp. |
| pH 4.00b | 4.03 | s.u. | ±0.15 s.u. | P | N/A | Geotech | 2GE870 | Mar-24 |
| pH 7.00b | 6.99 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 10.04 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 989 | µS/cm | ±5% | | | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

| CCV (Continued Calibration Verification): | | | | | Time: 1530 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 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 | NO | N/A | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.07 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.03 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 1010 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.09 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | 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 | L344-09 | 12/14/2023 |
| 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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: | 5/11/2023 |
|---|---|---|---|

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | JD | Location: | Vistra Duck Creek |
| Weather: | 70-75°F m.sunny wind SE 10-14 mph | Environment: | grass |

| | | | | | |
|---|---|---|---|---|---|
| Multiparameter Water Meter | Make: Aquatroll | Model: 600 | Serial Number: 762215 | | |
| Water Level Meter | Make: Heron | Model: Dipper-T | Serial Number: 11FF2209305ML | | |

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 3.81 | s.u. | ±0.1 s.u. | Fail | Yes | 4.00 | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 6.95 | s.u. | ±0.1 s.u. | pass | No | NA | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 9.93 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 15.67 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 1964.5 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 237.7 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.07 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 98.17 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0.00 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

| ICV (Initial Calibration Verification) | | | | | Time: 0939 | | | |
|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Action Taken? | Manufacturer | Lot# | Exp. |
| pH 4.00b | 4.03 | s.u. | ±0.15 s.u. | pass | NA | Geotech | 2GE870 | Mar-24 |
| pH 7.00b | 6.89 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 9.92 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 992.10 | µS/cm | ±5% | | | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

| CCV (Continued Calibration Verification): | | | | | Time: 1541 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
| pH 4.00a | 4.08 | s.u. | ±0.1 s.u. | pass | No | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.10 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.02 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 971.18 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.07 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.00 | NTU | <2 NTU | | | | 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 | L344-09 | 12/14/2023 |
| 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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: | [signature] | Date: | 5/11/23 |

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | Kyle lane | Location: | Duck creek |
| Weather: | 69° sunny | Environment: | Dry |
| Multiparameter Water Meter | Make: Horiba | Model: U-5000 | Serial Number: PW2GYJ03 |
| Water Level Meter | Make: Heron | Model: Water tape | Serial Number: 3717-T |

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 4.00 | s.u. | ±0.1 s.u. | P | NA | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 6.94 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 9.98 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 10.00 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 2020 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 230 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.08 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 97.10 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 1.20 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

## ICV (Initial Calibration Verification)

Time: 09:41

| 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 | 2GE870 | Mar-24 |
| pH 7.00b | 7.05 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 9.89 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 1,010 | µS/cm | ±5% | | | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

## CCV (Continued Calibration Verification):

Time: NA

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | | s.u. | ±0.1 s.u. | | | | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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) |

Approx. every 4 hrs, unless only one well

## CCV (Continued Calibration Verification):

Time: 16:04

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| 4.00a | 4.05 | s.u. | ±0.1 s.u. | P | NA | NA | MSI | L344-09 | 12/14/2023 |
| 7.00a | 7.04 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | 10.08 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 1040 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.00 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 1.50 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Comments: NA

| | | | |
|---|---|---|---|
| Signature: | [signature] | Date: | 5-11-23 |

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | Joe Reed | Location: | Duck Creek |
| Weather: | 69-80° wind 9-16mph | Environment: | Gravel Road |
| Multiparameter Water Meter | Make: Horiba | Model: U-5000 | Serial Number: YL9KJ9HA |
| Water Level Meter | Make: Solinst | Model: 101 | Serial Number: P7/LM2 |

| 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 | | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.02 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 9.94 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 0.0 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 2010 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 240 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.05 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 99.1 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

## ICV (Initial Calibration Verification)

Time: 955

| Buffer | Check Value | Units | Range | Pass/Fail | Action Taken? | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|
| pH 4.00b | 3.99 | s.u. | ±0.15 s.u. | P | N | Geotech | 2GE870 | Mar-24 |
| pH 7.00b | 7.00 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 9.96 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 1000 | µS/cm | ±5% | | | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

## CCV (Continued Calibration Verification):

Time: 1615

| 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 | | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.01 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.00 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 990 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.05 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | 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 | L344-09 | 12/14/2023 |
| 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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: | Joseph R Reed | Date: | 5/11/23 |

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | Joe Reed | Location: | Duck creek |
| Weather: | 63-81°F cloudy wind 7 mph | Environment: | wet / gravel road / grass |
| Multiparameter Water Meter | Make: Hor:ba | Model: V5000 | Serial Number: PW2GRJD3 |
| Water Level Meter | Make: Solinst | Model: 101 | Serial Number: 252879 |

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 3.98 | s.u. | ±0.1 s.u. | P | N | | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 6.99 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.00 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 4 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 1990 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 338 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.05 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 99.5 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

## ICV (Initial Calibration Verification)

Time: 912

| Buffer | Check Value | Units | Range | Pass/Fail | Action Taken? | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|
| pH 4.00b | 3.99 | s.u. | ±0.15 s.u. | P | N | Geotech | 2GE870 | Mar-24 |
| pH 7.00b | 6.98 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 9.98 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 998 | µS/cm | ±5% | | | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

## CCV (Continued Calibration Verification):

Time: 1320

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 4.00 | s.u. | ±0.1 s.u. | P | N | | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 6.99 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.01 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 1010 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.05 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | 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 | L344-09 | 12/14/2023 |
| 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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: Joseph R Reed

Date: 5/12/23

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | Kyle Lane | Location: | Duck Creek |
| Weather: | 63° to 81° rainy | Environment: | wet |

| | | | | | |
|---|---|---|---|---|---|
| Multiparameter Water Meter | Make: Horiba | Model: U-5000 | Serial Number: | yL9KJ9HA | |
| Water Level Meter | Make: Heron | Model: Water tape | Serial Number: | 3717-T | |

| 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 | NA | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.00 | s.u. | ±0.1 s.u. | P | NA | NA | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 9.83 | s.u. | ±0.1 s.u. | F | yes | 9.93 | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 21.00 | µS/cm | 0<25 µS/cm | P | NA | NA | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 1994 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 216 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.01 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 98.55 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

## ICV (Initial Calibration Verification)

Time: 09:20

| Buffer | Check Value | Units | Range | Pass/Fail | Action Taken? | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|
| pH 4.00b | 4.00 | s.u. | ±0.15 s.u. | P | NA | Geotech | 2GE870 | Mar-24 |
| pH 7.00b | 6.98 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 9.92 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 1,280 | µS/cm | ±5% | F | yes / 999 | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

## CCV (Continued Calibration Verification):

Time: NA

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | | s.u. | ±0.1 s.u. | | | | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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) |

Approx. every 4 hrs, unless only one well

## CCV (Continued Calibration Verification):

Time: 13:15

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| 4.00a | 4.06 | s.u. | ±0.1 s.u. | P | NA | NA | MSI | L344-09 | 12/14/2023 |
| 7.00a | 7.00 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | 10.01 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 1026 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.04 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Comments:

| | | | |
|---|---|---|---|
| Signature: | [signature] | Date: | 5-12-23 |

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | Aaron Amberson | Location: | Duck creek |
| Weather: | 69°-77° F cloudy, 12% wind SE 8 mph | Environment: | grass, mud |

| | | | | | |
|---|---|---|---|---|---|
| Multiparameter Water Meter | Make: Horiba | Model: U-5000 | Serial Number: | U4U1FTVF | |
| Water Level Meter | Make: Heron | Model: Dipper T | Serial Number: | 19FF211192HB | |

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 4.00 | s.u. | ±0.1 s.u. | P | NO | N/A | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.01 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.05 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 18 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 2080 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 232 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.09 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 99.87 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

234 @ 21°C

| ICV (Initial Calibration Verification) | | | | | Time: 0905 | | | |
|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Action Taken? | Manufacturer | Lot# | Exp. |
| pH 4.00b | 4.03 | s.u. | ±0.15 s.u. | P | NA | Geotech | 2GE870 | Mar-24 |
| pH 7.00b | 6.91 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 10.03 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 1016 | µS/cm | ±5% | | | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

| CCV (Continued Calibration Verification): | | | | | Time: 1300 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 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 | L344-09 | 12/14/2023 |
| pH 7.00a | 7.00 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.06 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 975 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.09 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | 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 | L344-09 | 12/14/2023 |
| 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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: | 5/12/2023 |
|---|---|---|---|

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | JD | Location: | Visitor Duck Creek |
| Weather: | 71-79°F cloudy wind SE 10 mph | Environment: | grass |
| Multiparameter Water Meter | Make: Aquatroll | Model: 600 | Serial Number: 762215 |
| Water Level Meter | Make: Heron | Model: Dipper-T | Serial Number: IIFF2209305ML |

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 4.01 | s.u. | ±0.1 s.u. | pass | No | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.06 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.04 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 4.80 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 1987.4 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 235.0 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.05 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 99.54 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0.00 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

| ICV (Initial Calibration Verification) | | | | | Time: 0905 | | | |
|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Action Taken? | Manufacturer | Lot# | Exp. |
| pH 4.00b | 4.04 | s.u. | ±0.15 s.u. | pass | NA | Geotech | 2GE870 | Mar-24 |
| pH 7.00b | 6.94 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 9.96 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 973.16 | µS/cm | ±5% | | | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

| CCV (Continued Calibration Verification): | | | | | Time: 1302 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
| pH 4.00a | 4.06 | s.u. | ±0.1 s.u. | pass | No | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.10 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.02 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 991.07 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.08 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.34 | NTU | <2 NTU | | | | 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 | L344-09 | 12/14/2023 |
| 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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: | [signature] | Date: | 5/12/23 |

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | Aaron Pemberton | Location: | Duck creek |
| Weather: | 62.0- 71°F cloudy wind NE 8mph | Environment: | grass, gravel, dirt woods |

| | | | | | |
|---|---|---|---|---|---|
| Multiparameter Water Meter | Make: Horiba | Model: U5000 | Serial Number: | UHUI FVTF | |
| Water Level Meter | Make: Heron | Model: Dipper T | Serial Number: | 3717-T | |

| 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 | NO | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.00 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.05 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 19 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 2020 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 240 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.00 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 95.62 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

240 @ 1700

| ICV (Initial Calibration Verification) | | | | | Time: 0930 | | | |
|---|---|---|---|---|---|---|---|---|
| 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 | 2GE870 | Mar-24 |
| pH 7.00b | 6.91 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 9.90 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 1000 | µS/cm | ±5% | | | Ricca | 4207N97 | Jul-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 | 4.02 | s.u. | ±0.1 s.u. | P | No | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.05 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.08 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 1010 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.09 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | 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 | L344-09 | 12/14/2023 |
| 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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: | 5/15/2023 |
|---|---|---|---|

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | Joe Reed | Location: | Duck Creek Power |
| Weather: | cloudy 62-71°F wind 6 mph | Environment: | grassy |

| | | | | | |
|---|---|---|---|---|---|
| Multiparameter Water Meter | Make: Horiba | Model: U 5010 | Serial Number: | PW2GKJD3 | |
| Water Level Meter | Make: Solinst | Model: 101 | Serial Number: | 252879 | |

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 3.98 | s.u. | ±0.1 s.u. | P | N | | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 6.99 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 9.98 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 2 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 1990 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 240 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.04 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 98.4 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

16.8°C

Approx. every 4 hrs, unless only one well

| ICV (Initial Calibration Verification) | | | | | Time: 929 | | | |
|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Action Taken? | Manufacturer | Lot# | Exp. |
| pH 4.00b | 3.99 | s.u. | ±0.15 s.u. | P | | Geotech | 2GE870 | Mar-24 |
| pH 7.00b | 7.00 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 9.98 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 990 | µS/cm | ±5% | | | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

| CCV (Continued Calibration Verification): | | | | | Time: JR 14 1615 | | | |
|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
| pH 4.00a | 4.01 | s.u. | ±0.1 s.u. | P | N | | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.00 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.02 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 1020 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.05 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | 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 | L344-09 | 12/14/2023 |
| 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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: | 5/15/23 |
|---|---|---|---|

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | JD | Location: | Vistra Duck Creek |
| Weather: | 61-68°F & cloudy wind ENE 10 mph | Environment: | grass |

| | | | | | |
|---|---|---|---|---|---|
| Multiparameter Water Meter | Make: Aquaread | Model: 600 | Serial Number: | 762215 | |
| Water Level Meter | Make: Heron | Model: Dipper-T | Serial Number: | 11FF220930SML | |

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 4.02 | s.u. | ±0.1 s.u. | pass | No | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.05 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.06 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 10.31 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 1751.4 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 237.5 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.08 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 99.28 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0.00 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

| ICV (Initial Calibration Verification) | | | | | Time: 0933 | | | |
|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Action Taken? | Manufacturer | Lot# | Exp. |
| pH 4.00b | 4.07 | s.u. | ±0.15 s.u. | pass | NA | Geotech | 2GE870 | Mar-24 |
| pH 7.00b | 6.93 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 9.99 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 1032.8 | µS/cm | ±5% | | | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

| CCV (Continued Calibration Verification): | | | | | Time: 1610 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
| pH 4.00a | 4.10 | s.u. | ±0.1 s.u. | pass | No | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.05 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.09 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 990.18 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.07 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.00 | NTU | <2 NTU | | | | 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 | L344-09 | 12/14/2023 |
| 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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: | [signature] | Date: | 5/15/23 |

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | Kyle Lane | Location: | Duck Creek |
| Weather: | 57° to 70° cloudy | Environment: | Dry |

| | | | | | |
|---|---|---|---|---|---|
| Multiparameter Water Meter | Make: Horiba | Model: U-5000 | Serial Number: | YL9KJ9HA | |
| Water Level Meter | Make: Heron | Model: Water tape | Serial Number: | 19FF2202131ML | |

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 4.17 | s.u. | ±0.1 s.u. | P | yes | 4.00 | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.10 | s.u. | ±0.1 s.u. | P | yes | 7.00 | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.08 | s.u. | ±0.1 s.u. | P | NA | NA | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 20.18 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 1970 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 215 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.07 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 97.20 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

## ICV (Initial Calibration Verification)

Time: 09:36

| Buffer | Check Value | Units | Range | Pass/Fail | Action Taken? | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|
| pH 4.00b | 3.99 | s.u. | ±0.15 s.u. | P | NA | Geotech | 2GE870 | Mar-24 |
| pH 7.00b | 6.98 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 10.09 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | 1,030 | µS/cm | ±5% | | | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

## CCV (Continued Calibration Verification):

Time: NA

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | | s.u. | ±0.1 s.u. | | | | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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) |

Approx. every 4 hrs, unless only one well

## CCV (Continued Calibration Verification):

Time: 16:21

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| 4.00a | 4.03 | s.u. | ±0.1 s.u. | P | NA | NA | MSI | L344-09 | 12/14/2023 |
| 7.00a | 6.94 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | 9.97 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | ~~994~~ 997 (KL) | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.05 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.58 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Comments: NA

| | | | |
|---|---|---|---|
| Signature: | Kyle Lane | Date: | 5-15-2023 |

# Multiparameter Meter Field Calibration Checklist

| | | | |
|---|---|---|---|
| Field Personnel: | Aaron Pemberton | Location: | Duck creek |
| Weather: | 60°-76° F Sunny Wind NE 9mph | Environment: | Grass, dirt, woods |

| | | | | | |
|---|---|---|---|---|---|
| Multiparameter Water Meter | Make: Horiba | Model: U50CC | Serial Number: | YL9KJ9MA | |
| Water Level Meter | Make: Heron | Model: Dipper-T | Serial Number: | 3717-T | |

| Buffer | Check Value | Units | Range | Pass/Fail | Calibrate? | Adjusted Reading | Manufacturer | Lot# | Exp. |
|---|---|---|---|---|---|---|---|---|---|
| pH 4.00a | 4.01 | s.u. | ±0.1 s.u. | P | NO | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.00 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.06 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC Zero (DI) | 15 | µS/cm | 0<25 µS/cm | | | | Pace Labs | N/A (DI) | N/A (DI) |
| SC 2000 | 1970 | µS/cm | ±5% | | | | Geotech | 2GE1442 | May-23 |
| ORP | 245 | mV | ±15 mV | | | | InSitu | 2G1762 | Jun-23 |
| DO (Zero pt) | 0.09 | mg/L | ±0.1 | | | | Macron | #000228049 | 8/26/2025 |
| DO (Saturated) | 98.10 | % | 97-100% | | | | Pace Labs | N/A (DI) | N/A (DI) |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | Pace Labs | N/A (DI) | N/A (DI) |

Approx. every 4 hrs, unless only one well

| ICV (Initial Calibration Verification) | | | | | Time: 0930 | | | |
|---|---|---|---|---|---|---|---|---|
| Buffer | Check Value | Units | Range | Pass/Fail | Action Taken? | Manufacturer | Lot# | Exp. |
| pH 4.00b | 4.02 | s.u. | ±0.15 s.u. | P | NA | Geotech | 2GE870 | Mar-24 |
| pH 7.00b | 6.90 | s.u. | ±0.15 s.u. | | | Geotech | 2GC931 | Mar-24 |
| pH 10.00b | 10.06 | s.u. | ±0.15 s.u. | | | Geotech | 2GE820 | May-24 |
| SC 1000 | N/A | µS/cm | ±5% | | | Ricca | 4207N97 | Jul-24 |

Approx. every 4 hrs, unless only one well

| CCV (Continued Calibration Verification): | | | | | Time: 1715 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 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 | NO | NA | MSI | L344-09 | 12/14/2023 |
| pH 7.00a | 7.04 | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| pH 10.00a | 10.08 | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | 974 | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-24 |
| DO (Zero pt) | 0.09 | mg/L | ±0.1 mg/L | | | | Macron | #000228049 | 8/26/2025 |
| Turbidity (DI) | 0.0 | NTU | <2 NTU | | | | 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 | L344-09 | 12/14/2023 |
| 7.00a | | s.u. | ±0.1 s.u. | | | | MSI | L343-07 | 12/9/2023 |
| 10.00a | | s.u. | ±0.1 s.u. | | | | MSI | M082-04 | 3/25/2024 |
| SC 1000 | | µS/cm | ±5% | | | | Ricca | 4207N97 | Jul-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: | [signature] | Date: | 5/17/2023 |

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

July 14, 2023

Daryl Johnson
Vistra - Duck Creek
17751 North Cilco Road
Canton, IL 61520-8761

Dear Daryl Johnson:

Please find enclosed the **revised** 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.

Gail J Schindler

Gail Schindler
Project Manager
(309) 692-9688 x1716
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## SAMPLE RECEIPT CHECK LIST

**Items not applicable will be marked as in compliance**

Work Order GE02234

| | |
|---|---|
| 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 |

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Work Order GE02539

| | |
|---|---|
| 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 |

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Work Order GE02656

| | |
|---|---|
| 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 |

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Work Order GE02775

| | |
|---|---|
| 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 |

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Work Order GE03000

| | |
|---|---|
| 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 |

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Work Order GE03280

| | |
|---|---|
| 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 |

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Work Order GE03619

| | |
|---|---|
| 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 |

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## ANALYTICAL RESULTS

**Sample:** GE02234-01 **Sampled:** 05/10/23 14:15
**Name:** BA02L **Received:** 05/10/23 17:20
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 1.57 | pCi/L | | | 1 | 0.389 | 06/13/23 21:10 | | 904.0 903.0 |

**Sample:** GE02234-02 **Sampled:** 05/10/23 13:00
**Name:** BA03 **Received:** 05/10/23 17:20
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.788 | pCi/L | | | 1 | 0.535 | 06/13/23 21:10 | | 904.0 903.0 |

**Sample:** GE02234-03 **Sampled:** 05/10/23 13:00
**Name:** BA03 DUP **Received:** 05/10/23 17:20
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.807 | pCi/L | | | 1 | 0.598 | 06/15/23 18:26 | | 904.0 903.0 |

**Sample:** GE02234-04 **Sampled:** 05/10/23 14:15
**Name:** BA03L **Received:** 05/10/23 17:20
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.744 | pCi/L | | | 1 | 0.606 | 06/15/23 18:26 | | 904.0 903.0 |

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## ANALYTICAL RESULTS

**Sample:** GE02234-05 **Sampled:** 05/10/23 13:50
**Name:** OM16 **Received:** 05/10/23 17:20
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 1.34 | pCi/L | | | 1 | 0.769 | 06/15/23 18:26 | | 904.0 903.0 |

**Sample:** GE02234-06 **Sampled:** 05/10/23 12:14
**Name:** OM17 **Received:** 05/10/23 17:20
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.561 J | pCi/L | | | 1 | 0.686 | 06/15/23 18:26 | | 904.0 903.0 |

**Sample:** GE02234-07 **Sampled:** 05/10/23 15:20
**Name:** OR13D **Received:** 05/10/23 17:20
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.853 | pCi/L | | | 1 | 0.611 | 06/16/23 00:06 | | 904.0 903.0 |

**Sample:** GE02234-09 **Sampled:** 05/10/23 15:45
**Name:** EB - 2 **Received:** 05/10/23 17:20
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.410 J | pCi/L | | | 1 | 0.827 | 06/16/23 00:06 | | 904.0 903.0 |

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## ANALYTICAL RESULTS

**Sample:** GE02539-01 **Sampled:** 05/10/23 15:43
**Name:** X301 **Received:** 05/11/23 17:20
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | U 0.0299 | pCi/L | | | | 0.542 | 06/14/23 16:23 | | 904.0 903.0 |

**Sample:** GE02656-01 **Sampled:** 05/11/23 13:33
**Name:** BA01 **Received:** 05/11/23 17:20
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.829 | pCi/L | | | 1 | 0.508 | 06/14/23 16:23 | | 904.0 903.0 |

**Sample:** GE02656-02 **Sampled:** 05/11/23 11:40
**Name:** BA04 **Received:** 05/11/23 17:20
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.152 U | pCi/L | | | 1 | 0.559 | 06/14/23 16:23 | | 904.0 903.0 |

**Sample:** GE02656-03 **Sampled:** 05/11/23 15:22
**Name:** G57S **Received:** 05/11/23 17:20
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.432 J | pCi/L | | | 1 | 0.467 | 06/14/23 16:23 | | 904.0 903.0 |

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## ANALYTICAL RESULTS

**Sample:** GE02656-04 **Sampled:** 05/11/23 15:11
**Name:** G64S **Received:** 05/11/23 17:20
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.232 J | pCi/L | | | 1 | 0.484 | 06/14/23 16:23 | | 904.0 903.0 |

**Sample:** GE02656-05 **Sampled:** 05/11/23 16:00
**Name:** EB-4 **Received:** 05/11/23 17:20
**Matrix:** Ground Water - Equipment Blank

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.000 U | pCi/L | | | 1 | 0.59 | 06/14/23 16:23 | | 904.0 903.0 |

**Sample:** GE02775-01 **Sampled:** 05/12/23 10:50
**Name:** BA05 **Received:** 05/12/23 14:31
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 2.07 | pCi/L | | | 1 | 0.628 | 06/14/23 16:23 | | 904.0 903.0 |

**Sample:** GE02775-02 **Sampled:** 05/12/23 12:19
**Name:** BA06 **Received:** 05/12/23 14:31
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 1.11 | pCi/L | | | 1 | 0.577 | 06/14/23 16:23 | | 904.0 903.0 |

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## ANALYTICAL RESULTS

**Sample:** GE02775-03 **Sampled:** 05/12/23 12:20
**Name:** G54L **Received:** 05/12/23 14:31
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.495 J | pCi/L | | | 1 | 0.517 | 06/14/23 16:23 | | 904.0 903.0 |

**Sample:** GE02775-04 **Sampled:** 05/12/23 13:04
**Name:** G54S **Received:** 05/12/23 14:31
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.881 | pCi/L | | | 1 | 0.551 | 06/14/23 16:23 | | 904.0 903.0 |

**Sample:** GE02775-05 **Sampled:** 05/12/23 13:04
**Name:** G54S DUP **Received:** 05/12/23 14:31
**Matrix:** Ground Water - Field Duplicate

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.229 U | pCi/L | | | 1 | 0.7 | 06/14/23 16:23 | | 904.0 903.0 |

**Sample:** GE02775-06 **Sampled:** 05/12/23 10:48
**Name:** G60L **Received:** 05/12/23 14:31
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.209 J | pCi/L | | | 1 | 0.498 | 06/14/23 16:23 | | 904.0 903.0 |

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## ANALYTICAL RESULTS

**Sample:** GE02775-07 **Sampled:** 05/12/23 11:00
**Name:** G60S **Received:** 05/12/23 14:31
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.911 | pCi/L | | | 1 | 0.689 | 06/14/23 16:23 | | 904.0 903.0 |

**Sample:** GE02775-08 **Sampled:** 05/12/23 12:45
**Name:** EB - 7 **Received:** 05/12/23 14:31
**Matrix:** Ground Water - Equipment Blank

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.0799 U | pCi/L | | | 1 | 0.512 | 06/14/23 16:23 | | 904.0 903.0 |

**Sample:** GE03000-01 **Sampled:** 05/15/23 11:23
**Name:** BA02 **Received:** 05/16/23 06:50
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.478 J | pCi/L | | | 1 | 0.563 | 06/16/23 00:06 | | 904.0 903.0 |

**Sample:** GE03000-02 **Sampled:** 05/15/23 15:18
**Name:** G02S **Received:** 05/16/23 06:50
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 1.42 | pCi/L | | | 1 | 0.472 | 06/16/23 00:06 | | 904.0 903.0 |

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## ANALYTICAL RESULTS

**Sample:** GE03000-03 **Sampled:** 05/15/23 12:56
**Name:** G50S **Received:** 05/16/23 06:50
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.146 U | pCi/L | | | 1 | 0.823 | 06/16/23 00:06 | | 904.0 903.0 |

**Sample:** GE03000-04 **Sampled:** 05/15/23 11:26
**Name:** G51S **Received:** 05/16/23 06:50
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 1.07 | pCi/L | | | 1 | 0.531 | 06/16/23 00:06 | | 904.0 903.0 |

**Sample:** GE03000-05 **Sampled:** 05/15/23 17:50
**Name:** EB #8 **Received:** 05/16/23 06:50
**Matrix:** Ground Water - Equipment Blank

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.234 U | pCi/L | | | 1 | 0.575 | 06/16/23 00:06 | | 904.0 903.0 |

**Sample:** GE03000-06 **Sampled:** 05/15/23 17:50
**Name:** EB #9 **Received:** 05/16/23 06:50
**Matrix:** Ground Water - Equipment Blank

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.0946 U | pCi/L | | | 1 | 0.606 | 06/16/23 00:06 | | 904.0 903.0 |

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## ANALYTICAL RESULTS

**Sample:** GE03000-07 **Sampled:** 05/15/23 15:00
**Name:** G64L **Received:** 05/16/23 06:50
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.938 | pCi/L | | | 1 | 0.561 | 06/16/23 00:06 | | 904.0 903.0 |

**Sample:** GE03000-08 **Sampled:** 05/15/23 13:14
**Name:** OM25S **Received:** 05/16/23 06:50
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 27.8 | pCi/L | | | 1 | 10.6 | 06/16/23 00:06 | | 904.0 903.0 |

**Sample:** GE03000-09 **Sampled:** 05/15/23 14:05
**Name:** OM12 **Received:** 05/16/23 06:50
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 1.69 | pCi/L | | | 1 | 0.568 | 06/16/23 00:06 | | 904.0 903.0 |

**Sample:** GE03000-10 **Sampled:** 05/15/23 13:24
**Name:** OM21 **Received:** 05/16/23 06:50
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 1.53 | pCi/L | | | 1 | 0.59 | 06/16/23 00:06 | | 904.0 903.0 |

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## ANALYTICAL RESULTS

**Sample:** GE03000-11 **Sampled:** 05/15/23 16:00
**Name:** OM23D **Received:** 05/16/23 06:50
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.174 U | pCi/L | | | 1 | 0.566 | 06/16/23 00:06 | | 904.0 903.0 |

**Sample:** GE03000-12 **Sampled:** 05/15/23 12:33
**Name:** OR11 **Received:** 05/16/23 06:50
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.494 | pCi/L | | | 1 | 0.492 | 06/16/23 00:06 | | 904.0 903.0 |

**Sample:** GE03000-13 **Sampled:** 05/15/23 11:35
**Name:** OR14D **Received:** 05/16/23 06:50
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.199 U | pCi/L | | | 1 | 0.626 | 06/16/23 00:06 | | 904.0 903.0 |

**Sample:** GE03000-14 **Sampled:** 05/15/23 15:28
**Name:** OR19 **Received:** 05/16/23 06:50
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.849 | pCi/L | | | 1 | 0.56 | 06/16/23 00:06 | | 904.0 903.0 |

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## ANALYTICAL RESULTS

**Sample:** GE03000-15 **Sampled:** 05/15/23 11:10
**Name:** OR20 **Received:** 05/16/23 06:50
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.127 U | pCi/L | | | 1 | 0.538 | 06/14/23 16:23 | | 904.0 903.0 |

**Sample:** GE03280-01 **Sampled:** 05/16/23 10:48
**Name:** OM01 **Received:** 05/16/23 17:47
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.799 | pCi/L | | | | 0.63 | 06/16/23 17:46 | | 904.0 903.0 |

**Sample:** GE03280-02 **Sampled:** 05/16/23 12:15
**Name:** OM04S **Received:** 05/16/23 17:47
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 1.28 | pCi/L | | | | 0.708 | 06/16/23 17:46 | | 904.0 903.0 |

**Sample:** GE03280-03 **Sampled:** 05/16/23 14:58
**Name:** OM24D **Received:** 05/16/23 17:47
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.290 U | pCi/L | | | | 0.67 | 06/16/23 17:47 | | 904.0 903.0 |

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## ANALYTICAL RESULTS

**Sample:** GE03280-04 **Sampled:** 05/16/23 14:58
**Name:** OM24D DUP **Received:** 05/16/23 17:47
**Matrix:** Ground Water - Field Duplicate

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.0414 U | pCi/L | | | | 0.601 | 06/16/23 17:47 | | 904.0 903.0 |

**Sample:** GE03280-05 **Sampled:** 05/16/23 12:14
**Name:** OR02 **Received:** 05/16/23 17:47
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 1.68 | pCi/L | | | | 0.703 | 06/16/23 17:47 | | 904.0 903.0 |

**Sample:** GE03280-06 **Sampled:** 05/16/23 13:36
**Name:** OR03D **Received:** 05/16/23 17:47
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 1.21 | pCi/L | | | | 0.709 | 06/16/23 17:47 | | 904.0 903.0 |

**Sample:** GE03280-07 **Sampled:** 05/16/23 10:55
**Name:** OR04D **Received:** 05/16/23 17:47
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 2.39 | pCi/L | | | | 0.593 | 06/16/23 17:47 | | 904.0 903.0 |

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## ANALYTICAL RESULTS

**Sample:** GE03280-08 **Sampled:** 05/16/23 17:41
**Name:** EQUIPMENT BLANK 10 **Received:** 05/16/23 17:47
**Matrix:** Ground Water - Equipment Blank

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.329 J | pCi/L | | | | 0.577 | 06/16/23 17:47 | | 904.0 903.0 |

**Sample:** GE03280-09 **Sampled:** 05/16/23 17:26
**Name:** EQUIPMENT BLANK 11 **Received:** 05/16/23 17:47
**Matrix:** Ground Water - Equipment Blank

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.213 U | pCi/L | | | | 0.695 | 06/16/23 17:47 | | 904.0 903.0 |

**Sample:** GE03619-01 **Sampled:** 05/17/23 12:13
**Name:** OM07 **Received:** 05/17/23 18:14
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.643 J | pCi/L | | | 1 | 0.681 | 06/14/23 17:51 | | 904.0 903.0 |

**Sample:** GE03619-02 **Sampled:** 05/17/23 16:55
**Name:** OM22D **Received:** 05/17/23 18:14
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 1.54 | pCi/L | | | 1 | 0.497 | 06/16/23 17:46 | | 904.0 903.0 |

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## ANALYTICAL RESULTS

**Sample:** GE03619-03 **Sampled:** 05/17/23 13:45
**Name:** OR06A **Received:** 05/17/23 18:14
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 1.34 | pCi/L | | | 1 | 0.884 | 06/16/23 17:46 | | 904.0 903.0 |

**Sample:** GE03619-04 **Sampled:** 05/17/23 15:20
**Name:** OR13S **Received:** 05/17/23 18:14
**Matrix:** Ground Water - Grab

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.320 J | pCi/L | | | 1 | 0.606 | 06/16/23 17:46 | | 904.0 903.0 |

**Sample:** GE03619-05 **Sampled:** 05/17/23 17:08
**Name:** EQUIPMENT BLANK 12 **Received:** 05/17/23 18:14
**Matrix:** Ground Water - Equipment Blank

| Parameter | Result | Unit | Qualifier | Prepared | Dilution | MRL | Analyzed | Analyst | Method |
|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous - Pace Analytical - Mt Juliet, Tn** | | | | | | | | | |
| Rad 226 and 228-Subcontract | 0.114 U | pCi/L | | | 1 | 0.58 | 06/16/23 17:46 | | 904.0 903.0 |

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## QC SAMPLE RESULTS

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

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## NOTES

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

Revised Report - made corrections and added missing samples.

* 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

Gail J Schindler

Certified by: Gail Schindler, Project Manager

# ANALYTICAL REPORT

June 23, 2023



## Pace IR - Peoria, IL

| | |
|---|---|
| Sample Delivery Group: | L1617720 |
| Samples Received: | 05/18/2023 |
| Project Number: | GE02234 |
| Description: | Vistra-Duck Creek |
| Site: | 001 |
| Report To: | Gail Schindler<br>2231 W. Altorfer Drive<br>Peoria, IL 61615 |

Entire Report Reviewed By:

Haley Torrence

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.

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# SAMPLE SUMMARY

## BA02L L1617720-01 Non-Potable Water

Collected by | Collected date/time 05/10/23 14:15 | Received date/time 05/18/23 09:15

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071725 | 1 | 06/05/23 15:23 | 06/08/23 20:25 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072625 | 1 | 06/12/23 10:09 | 06/13/23 21:10 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072625 | 1 | 06/12/23 10:09 | 06/13/23 21:10 | RGT | Mt. Juliet, TN |

## BA03 L1617720-02 Non-Potable Water

Collected by | Collected date/time 05/10/23 13:00 | Received date/time 05/18/23 09:15

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071725 | 1 | 06/05/23 15:23 | 06/08/23 20:25 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072625 | 1 | 06/12/23 10:09 | 06/13/23 21:10 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072625 | 1 | 06/12/23 10:09 | 06/13/23 21:10 | RGT | Mt. Juliet, TN |

## BA03 DUP L1617720-03 Non-Potable Water

Collected by | Collected date/time 05/10/23 13:00 | Received date/time 05/18/23 09:15

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/15/23 18:26 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/15/23 18:26 | RGT | Mt. Juliet, TN |

## BA03L L1617720-04 Non-Potable Water

Collected by | Collected date/time 05/10/23 14:15 | Received date/time 05/18/23 09:15

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/15/23 18:26 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/15/23 18:26 | RGT | Mt. Juliet, TN |

## OM16 L1617720-05 Non-Potable Water

Collected by | Collected date/time 05/10/23 13:50 | Received date/time 05/18/23 09:15

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/15/23 18:26 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/15/23 18:26 | RGT | Mt. Juliet, TN |

## OM17 L1617720-06 Non-Potable Water

Collected by | Collected date/time 05/10/23 12:14 | Received date/time 05/18/23 09:15

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/15/23 18:26 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/15/23 18:26 | RGT | Mt. Juliet, TN |

# SAMPLE SUMMARY

## OR13D L1617720-07 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/10/23 15:20 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |

## EB-2 L1617720-08 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/10/23 15:45 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |

# CASE NARRATIVE

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

Haley Torrence
Project Manager

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 1.44 | | 0.214 | 0.342 | 06/08/2023 20:25 | WG2071725 |
| *(T) Barium* | *98.4* | | | *30.0-143* | *06/08/2023 20:25* | WG2071725 |
| *(T) Yttrium* | *119* | | | *30.0-136* | *06/08/2023 20:25* | WG2071725 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 1.57 | | 0.256 | 0.389 | 06/13/2023 21:10 | WG2072625 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.125 | J | 0.140 | 0.185 | 06/13/2023 21:10 | WG2072625 |
| *(T) Barium-133* | *97.4* | | | *30.0-143* | *06/13/2023 21:10* | WG2072625 |

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.686 | | 0.279 | 0.497 | 06/08/2023 20:25 | WG2071725 |
| *(T) Barium* | *101* | | | *30.0-143* | *06/08/2023 20:25* | WG2071725 |
| *(T) Yttrium* | *108* | | | *30.0-136* | *06/08/2023 20:25* | WG2071725 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.788 | | 0.311 | 0.535 | 06/13/2023 21:10 | WG2072625 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.102 | J | 0.137 | 0.198 | 06/13/2023 21:10 | WG2072625 |
| *(T) Barium-133* | *100* | | | *30.0-143* | *06/13/2023 21:10* | WG2072625 |

# BA03 DUP SAMPLE RESULTS - 03

Collected date/time: 05/10/23 13:00 L1617720

## Radiochemistry by Method 904/9320

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-228 | 0.690 | | 0.260 | 0.456 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *95.8* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *105* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 0.807 | | 0.354 | 0.598 | 06/15/2023 18:26 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-226 | 0.117 | U | 0.240 | 0.387 | 06/15/2023 18:26 | WG2072626 |
| *(T) Barium-133* | *85.5* | | | *30.0-143* | *06/15/2023 18:26* | WG2072626 |

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.0980 | U | 0.295 | 0.535 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *94.9* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *115* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.744 | | 0.456 | 0.606 | 06/15/2023 18:26 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.646 | | 0.348 | 0.285 | 06/15/2023 18:26 | WG2072626 |
| *(T) Barium-133* | *88.0* | | | *30.0-143* | *06/15/2023 18:26* | WG2072626 |

OM16 SAMPLE RESULTS - 05

Collected date/time: 05/10/23 13:50 L1617720

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.594 | J | 0.391 | 0.697 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *71.6* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *104* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 1.34 | | 0.554 | 0.769 | 06/15/2023 18:26 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.742 | | 0.392 | 0.326 | 06/15/2023 18:26 | WG2072626 |
| *(T) Barium-133* | *80.3* | | | *30.0-143* | *06/15/2023 18:26* | WG2072626 |

OM17 SAMPLE RESULTS - 06

Collected date/time: 05/10/23 13:14 L1617720

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | -0.0713 | U | 0.311 | 0.568 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *94.5* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *110* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.561 | J | 0.491 | 0.686 | 06/15/2023 18:26 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.561 | | 0.380 | 0.385 | 06/15/2023 18:26 | WG2072626 |
| *(T) Barium-133* | *72.7* | | | *30.0-143* | *06/15/2023 18:26* | WG2072626 |

OR13D SAMPLE RESULTS - 07

Collected date/time: 05/10/23 15:20 L1617720

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.353 | J | 0.286 | 0.513 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *87.5* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *123* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.853 | | 0.435 | 0.611 | 06/16/2023 00:06 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.500 | | 0.328 | 0.331 | 06/16/2023 00:06 | WG2072626 |
| *(T) Barium-133* | *78.3* | | | *30.0-143* | *06/16/2023 00:06* | WG2072626 |

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.410 | J | 0.394 | 0.709 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *89.6* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *101* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.410 | J | 0.457 | 0.827 | 06/16/2023 00:06 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.000 | U | 0.231 | 0.425 | 06/16/2023 00:06 | WG2072626 |
| *(T) Barium-133* | *79.2* | | | *30.0-143* | *06/16/2023 00:06* | WG2072626 |

## Method Blank (MB)

(MB) R3934754-1 06/08/23 20:25

| Analyte | MB Result pCi/l | MB Qualifier | MB Uncertainty + / - pCi/l | MB MDA pCi/l |
|---|---|---|---|---|
| Radium-228 | 0.102 | U | 0.142 | 0.261 |
| *(T) Barium* | *112* | | *112* | |
| *(T) Yttrium* | *124* | | *124* | |

## L1612483-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1612483-01 06/08/23 20:25 • (DUP) R3934754-5 06/08/23 20:25

| Analyte | Original Result pCi/l | Original Uncertainty + / - | Original MDA pCi/l | DUP Result pCi/l | DUP Uncertainty + / - | DUP MDA pCi/l | Dilution | DUP RPD % | DUP RER | DUP Qualifier | DUP RPD Limits % | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 14.7 | 0.437 | 0.512 | 15.5 | 0.531 | 0.512 | 1 | 5.22 | 1.15 | | 20 | 3 |
| *(T) Barium* | *239* | | | *213* | *213* | | | | | C1 | | |
| *(T) Yttrium* | *109* | | | *123* | *123* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3934754-2 06/08/23 20:25

| Analyte | Spike Amount pCi/l | LCS Result pCi/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Radium-228 | 5.00 | 4.20 | 84.0 | 80.0-120 | |
| *(T) Barium* | | | *112* | | |
| *(T) Yttrium* | | | *101* | | |

## L1613236-25 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1613236-25 06/08/23 20:25 • (MS) R3934754-3 06/08/23 20:25 • (MSD) R3934754-4 06/08/23 20:25

| 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 | 1.21 | 14.2 | 16.9 | 77.6 | 94.0 | 1 | 70.0-130 | | | 17.6 | | 20 |
| *(T) Barium* | | *94.6* | | | *106* | *104* | | | | | | | |
| *(T) Yttrium* | | *110* | | | *108* | *128* | | | | | | | |

## Method Blank (MB)

(MB) R3937268-1 06/09/23 20:54

| Analyte | MB Result | MB Qualifier | MB Uncertainty | MB MDA |
|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l |
| Radium-228 | 0.324 | | 0.147 | 0.260 |
| *(T) Barium* | *106* | | *106* | |
| *(T) Yttrium* | *107* | | *107* | |

## L1617724-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1617724-03 06/09/23 20:54 • (DUP) R3937268-5 06/09/23 20:54

| Analyte | Original Result | Original Uncertainty | Original MDA | DUP Result | DUP Uncertainty | DUP MDA | Dilution | DUP RPD | DUP RER | DUP Qualifier | DUP RPD Limits | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | pCi/l | + / - | pCi/l | pCi/l | + / - | pCi/l | | % | | | % | |
| Radium-228 | -0.256 | 0.399 | 0.734 | 0.705 | 0.376 | 0.734 | 1 | 200 | 1.75 | | 20 | 3 |
| *(T) Barium* | *106* | | | *94.2* | *94.2* | | | | | | | |
| *(T) Yttrium* | *96.8* | | | *115* | *115* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3937268-2 06/09/23 20:54

| Analyte | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---|---|---|---|---|---|
| | pCi/l | pCi/l | % | % | |
| Radium-228 | 5.00 | 4.07 | 81.4 | 80.0-120 | |
| *(T) Barium* | | | *97.6* | | |
| *(T) Yttrium* | | | *120* | | |

## L1617720-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617720-08 06/09/23 20:54 • (MS) R3937268-3 06/09/23 20:54 • (MSD) R3937268-4 06/09/23 20:54

| Analyte | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | MS RER | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | pCi/l | pCi/l | pCi/l | pCi/l | % | % | | % | | | % | | % |
| Radium-228 | 10.0 | 0.410 | 8.66 | 9.60 | 82.5 | 91.9 | 1 | 70.0-130 | | | 10.2 | | 20 |
| *(T) Barium* | | *89.6* | | | *105* | *98.0* | | | | | | | |
| *(T) Yttrium* | | *101* | | | *118* | *106* | | | | | | | |

Radiochemistry by Method SM7500Ra B M

## Method Blank (MB)

(MB) R3936878-1 06/13/23 18:47

| Analyte | MB Result pCi/l | MB Qualifier | MB Uncertainty + / - | MB MDA pCi/l |
|---|---|---|---|---|
| Radium-226 | 0.0168 | U | 0.0520 | 0.0901 |
| *(T) Barium-133* | *91.2* | | *91.2* | |

## L1617720-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1617720-01 06/13/23 21:10 • (DUP) R3936878-5 06/13/23 18:47

| Analyte | Original Result pCi/l | Original Uncertainty + / - | Original MDA pCi/l | DUP Result pCi/l | DUP Uncertainty + / - | DUP MDA pCi/l | Dilution | DUP RPD % | DUP RER | DUP Qualifier | DUP RPD Limits % | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.125 | 0.140 | 0.185 | 0.177 | 0.231 | 0.185 | 1 | 34.6 | 0.193 | J | 20 | 3 |
| *(T) Barium-133* | *97.4* | | | *101* | *101* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3936878-2 06/13/23 18:47

| Analyte | Spike Amount pCi/l | LCS Result pCi/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Radium-226 | 5.01 | 5.28 | 105 | 80.0-120 | |
| *(T) Barium-133* | | | *101* | | |

## L1613236-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1613236-17 06/13/23 21:10 • (MS) R3936878-3 06/13/23 18:47 • (MSD) R3936878-4 06/13/23 18:47

| 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 | 0.00663 | 19.9 | 19.0 | 99.7 | 95.1 | 1 | 75.0-125 | | | 4.72 | | 20 |
| *(T) Barium-133* | | *97.0* | | | *92.2* | *99.8* | | | | | | | |

# QUALITY CONTROL SUMMARY

Radiochemistry by Method SM7500Ra B M L1617720-03,04,05,06,07,08

## Method Blank (MB)

(MB) R3940721-1 06/15/23 18:26

| Analyte | MB Result pCi/l | MB Qualifier | MB Uncertainty + / - pCi/l | MB MDA pCi/l |
|---|---|---|---|---|
| Radium-226 | -0.0163 | U | 0.0422 | 0.100 |
| *(T) Barium-133* | *82.0* | | *82.0* | |

## L1617724-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1617724-01 06/16/23 00:06 • (DUP) R3940721-5 06/15/23 18:26

| Analyte | Original Result pCi/l | Original Uncertainty + / - | Original MDA pCi/l | DUP Result pCi/l | DUP Uncertainty + / - | DUP MDA pCi/l | Dilution | DUP RPD % | DUP RER | DUP Qualifier | DUP RPD Limits % | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.110 | 0.233 | 0.371 | 0.121 | 0.248 | 0.371 | 1 | 9.44 | 0.0320 | U | 20 | 3 |
| *(T) Barium-133* | *83.7* | | | *82.7* | *82.7* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3940721-2 06/15/23 18:26

| Analyte | Spike Amount pCi/l | LCS Result pCi/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Radium-226 | 5.01 | 5.69 | 114 | 80.0-120 | |
| *(T) Barium-133* | | | *80.8* | | |

## L1617720-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617720-03 06/15/23 18:26 • (MS) R3940721-3 06/15/23 18:26 • (MSD) R3940721-4 06/15/23 18:26

| 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 | 0.117 | 21.7 | 23.9 | 108 | 119 | 1 | 75.0-125 | | | 9.58 | | 20 |
| *(T) Barium-133* | | *85.5* | | | *80.8* | *86.0* | | | | | | | |

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

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

## Abbreviations and Definitions

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

| Qualifier | Description |
|---|---|
| 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. |
| 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 | LAO000356 |
| 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.

Internal Transfer Chain of Custody

Pace Analytical

State of Origin: IL
Cert. Needed: [X] YES [ ] NO

GE02234 **Workorder Name:** VISTRA - DUCK CREEK

Owner Received Date: 5/10/2023

Results Requi By: 5/28/2023

| Report To: | Subcontract To: |
|---|---|
| Gail Schindler<br>Pace Analytical - IL/MO<br>2231 W. Altorfer Drive<br>Peoria, IL 61615<br>800-752-6651 | Pace Analytical - Mt Juliet<br>12065 Lebanon Rd<br>Mt Juliet TN 37122 |

| Item | Sample ID | Sample Type | Collect Date/Time | Lab ID | Matrix | Preserved Containers: HNO3 | Requested Analysis: Radium 226 | Requested Analysis: Radium 228 | LAB USE ONLY: L1617720 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | BA02L | GRAB | 5/10/2023 14:15 | GE02234-01 | GW | X | X | X | -01 |
| 2 | BA03 | GRAB | 5/10/2023 13:00 | GE02234-02 | GW | X | X | X | -02 |
| 3 | BA03 DUP | GRAB | 5/10/2023 13:00 | GE02234-03 | GW | X | X | X | -03 |
| 4 | BA03L | GRAB | 5/10/2023 14:15 | GE02234-04 | GW | X | X | X | -04 |
| 5 | OM16 | GRAB | 5/10/2023 13:50 | GE02234-05 | GW | X | X | X | -05 |
| 6 | OM17 | GRAB | 5/10/2023 12:14 | GE02234-06 | GW | X | X | X | -06 |
| 7 | OR13D | GRAB | 5/10/2023 15:20 | GE02234-07 | GW | X | X | X | -07 |
| 8 | ~~X301~~ MP 6/26/23 | GRAB | 5/10/2023 15:43 | GE02234-08 | GW | X | X | X | ~~-08~~ -10 5/18 |
| 9 | EB-2 | GRAB | 5/10/2023 15:45 | GE02234-09 | DI | X | X | X | -08 |

| Transfers | Date/Time | Received By | Date/Time | Comments |
|---|---|---|---|---|
| 1 5/16/2023 14:31 | 5/17/23 1530 | | | Needs 226, 228 and combined |
| 2 | | | | Include QC summary and edd |
| 3 | | Hailey Ratliff | 5/18/23 09:15 | 10 day TAT |

Cooler Temperature on Receipt _____ °C | Custody Seal Y or N | Received on Ice Y or N | Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.



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
RAD Screen <0.5 mR hr: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

L1617720

Pace Analytical®
www.pacelabs.com

Ship to :
Pace Analytical Services, LLC
12065 Lebanon Rd
Mt Juliet TN 37122

(615)758-5858

INTER_LABORATORY WORK ORDER # GE02234
(To be complete by sending lab)

| | |
|---|---|
| Sending Project No: | GE02234 |
| Receiving Project No: | |
| Check Box for Consolidated Invoice: | |
| Date Prepared: | 5/17/2023 |
| REQUESTED COMPLETION DATE: | 5/28/2023 |

| | | | |
|---|---|---|---|
| Sending Region | IR72-IL/MO | Sending Project Mgr. | Gail Schindler |
| Receiving Region | MT JULIET | External Client | VISTRA - DUCK CREEK |
| State of Sample Origin | IL | QC Deliverable | **STD Report** |

**All questions should be addressed to sending project manager.**

Requested Reportable Units _____ Report Wet or Dry Weight? _____ Cert Needed: IL

| WORK REQUESTED | | | | | | |
|---|---|---|---|---|---|---|
| Method Description | Container Type | Quantity of | Preservative | Quantity of | Unit Price | Amount |
| Radium 226 | | 9 | | 9 | $121.05 | $1,089.45 |
| Radium 228 | | 9 | | 9 | $121.05 | $1,089.45 |
| | | 1 | | 1 | | $0.00 |
| | | | | | **TOTAL** | $2,178.90 |

**Special Requirements:** Report as 226, 228 & combined 226/228. Include QC summary & edd

| Receiving Region Department | Acctg. Code | Totals from above | Revenue Allocation | |
|---|---|---|---|---|
| | | | Receiving Region (80%) | Client Services Dept. |
| radiological | 38 | $2,178.90 | $1,743.12 | $435.78 |
| | | | | |
| | | | | |
| * Custom Revenue Allocation | | TOTAL | $1,743.12 | $435.78 |

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region: [ ] Yes [X] No

CONFIRMATION OF WORK COMPLETED

Date Completed: _____ Receiving Project Manager: _____

Original sent to the receiving lab - Copy kept at the sending lab.
When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

# SUBCONTRACT ORDER
## Transfer Chain of Custody

L1617720

**Pace Analytical Services, LLC**

**GE02234**

**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: GE02234-06**
**Name:** OM17

**Sampled:** 05/10/23 12:14
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/25/23 16:00 | 11/06/23 12:14 | |

**Sample: GE02234-07**
**Name:** OR13D

**Sampled:** 05/10/23 15:20
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/25/23 16:00 | 11/06/23 15:20 | |

**Sample: GE02234-09**
**Name:** EB - 2

**Sampled:** 05/10/23 15:45
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/25/23 16:00 | 11/06/23 15:45 | |

**Please email results to Gail Schindler at gail.schindler@pacelabs.com**

Date Shipped: 5/17/23 Total # of Containers: 8 Sample Origin (State): IL PO #: _____

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

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| [signature] | 5/17/23 1530 | | |
| | | | |

| | |
|---|---|
| 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 |

# SUBCONTRACT ORDER
## Transfer Chain of Custody

**Pace Analytical Services, LLC**

**GE02234**

L1617720

**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: GE02234-01**
**Name:** BA02L

**Sampled:** 05/10/23 14:15
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/25/23 16:00 | 11/06/23 14:15 | |

**Sample: GE02234-02**
**Name:** BA03

**Sampled:** 05/10/23 13:00
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/25/23 16:00 | 11/06/23 13:00 | |

**Sample: GE02234-03**
**Name:** BA03 DUP

**Sampled:** 05/10/23 13:00
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/25/23 16:00 | 11/06/23 13:00 | |

**Sample: GE02234-04**
**Name:** BA03L

**Sampled:** 05/10/23 14:15
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/25/23 16:00 | 11/06/23 14:15 | |

**Sample: GE02234-05**
**Name:** OM16

**Sampled:** 05/10/23 13:50
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/25/23 16:00 | 11/06/23 13:50 | |

L16177720

| Tracking Numbers | NS A7 Temperature |
|---|---|
| 6319 5998 8690 | 19.3±0=19.3 |
| 6319 5998 8715 | 17.3±0=17.3 |
| 6319 5998 8726 | 19.4±0=19.4 |
| 6319 5998 8704 | 13.1±0=13.1 |
| 6319 5998 8689 | 17.6±0=17.6 |
| | |

## 5/18-NCF-L1617720 PACEPIL

R5

**Time estimate:** oh **Time spent:** oh

**Members**

Hailey Melson (responsible) HT Haley Torrence

Due on *22 May 2023 8:00 AM* for target *Done*

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

**Comments**

*Hailey Melson* — *18 May 2023 2:52 PM*
Missing ID: X301

*Haley Torrence* — *19 May 2023 8:49 AM*
PACEPIL notified 5/18

*Haley Torrence* — *19 May 2023 1:23 PM*
They said to disregard the missing sample. Thanks!

*Hailey Melson* — *19 May 2023 1:35 PM*
Done

# ANALYTICAL REPORT

June 19, 2023



## Pace IR - Peoria, IL

| | |
|---|---|
| Sample Delivery Group: | L1617726 |
| Samples Received: | 05/18/2023 |
| Project Number: | GE02539 |
| Description: | Vistra-Duck Creek |
| Site: | 001 |
| Report To: | Gail Schindler |
| | 2231 W. Altorfer Drive |
| | Peoria, IL 61615 |

Entire Report Reviewed By:

Haley Torrence

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

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# SAMPLE SUMMARY

## X301 L1617726-01 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/10/23 15:43 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2072260 | 1 | 06/06/23 11:11 | 06/10/23 08:55 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |

# CASE NARRATIVE

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

Haley Torrence
Project Manager

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.0209 | U | 0.230 | 0.413 | 06/10/2023 08:55 | WG2072260 |
| *(T) Barium* | *114* | | | *30.0-143* | *06/10/2023 08:55* | WG2072260 |
| *(T) Yttrium* | *105* | | | *30.0-136* | *06/10/2023 08:55* | WG2072260 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.0299 | U | 0.287 | 0.542 | 06/14/2023 16:23 | WG2072628 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.00897 | U | 0.171 | 0.351 | 06/14/2023 16:23 | WG2072628 |
| *(T) Barium-133* | *70.7* | | | *30.0-143* | *06/14/2023 16:23* | WG2072628 |

## Method Blank (MB)

(MB) R3935700-1 06/10/23 08:55

| Analyte | MB Result pCi/l | MB Qualifier | MB Uncertainty + / - pCi/l | MB MDA pCi/l |
|---|---|---|---|---|
| Radium-228 | -0.0977 | U | 0.152 | 0.279 |
| *(T) Barium* | *114* | | *114* | |
| *(T) Yttrium* | *93.4* | | *93.4* | |

## L1617729-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1617729-01 06/10/23 08:55 • (DUP) R3935700-5 06/10/23 08:55

| Analyte | Original Result pCi/l | Original Uncertainty + / - | Original MDA pCi/l | DUP Result pCi/l | DUP Uncertainty + / - | DUP MDA pCi/l | Dilution | DUP RPD % | DUP RER | DUP Qualifier | DUP RPD Limits % | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 1.74 | 0.333 | 0.547 | 0.290 | 0.402 | 0.547 | 1 | 143 | 2.78 | U | 20 | 3 |
| *(T) Barium* | *81.8* | | | *86.3* | *86.3* | | | | | | | |
| *(T) Yttrium* | *139* | | | *132* | *132* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3935700-2 06/10/23 08:55

| Analyte | Spike Amount pCi/l | LCS Result pCi/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Radium-228 | 5.00 | 4.57 | 91.5 | 80.0-120 | |
| *(T) Barium* | | | *110* | | |
| *(T) Yttrium* | | | *95.4* | | |

## L1617726-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617726-01 06/10/23 08:55 • (MS) R3935700-3 06/10/23 08:55 • (MSD) R3935700-4 06/10/23 08:55

| 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 | 0.0209 | 15.4 | 14.2 | 91.8 | 84.9 | 1 | 70.0-130 | | | 7.78 | | 20 |
| *(T) Barium* | | *114* | | | *120* | *116* | | | | | | | |
| *(T) Yttrium* | | *105* | | | *101* | *109* | | | | | | | |

## Method Blank (MB)

(MB) R3937863-1 06/14/23 16:23

| Analyte | MB Result pCi/l | MB Qualifier | MB Uncertainty + / - pCi/l | MB MDA pCi/l |
|---|---|---|---|---|
| Radium-226 | 0.0613 | J | 0.0908 | 0.136 |
| *(T) Barium-133* | *47.6* | | *47.6* | |

## L1617727-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1617727-01 06/14/23 16:23 • (DUP) R3937863-5 06/14/23 16:23

| Analyte | Original Result pCi/l | Original Uncertainty + / - | Original MDA pCi/l | DUP Result pCi/l | DUP Uncertainty + / - | DUP MDA pCi/l | Dilution | DUP RPD % | DUP RER | DUP Qualifier | DUP RPD Limits % | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.742 | 0.400 | 0.359 | 0.496 | 0.326 | 0.359 | 1 | 39.8 | 0.477 | | 20 | 3 |
| *(T) Barium-133* | *76.2* | | | *83.9* | *83.9* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3937863-2 06/14/23 16:23

| Analyte | Spike Amount pCi/l | LCS Result pCi/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Radium-226 | 5.01 | 5.91 | 118 | 80.0-120 | |
| *(T) Barium-133* | | | *61.3* | | |

## L1617729-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617729-03 06/14/23 16:23 • (MS) R3937863-3 06/14/23 16:23 • (MSD) R3937863-4 06/14/23 16:23

| 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 | 0.0663 | 22.3 | 22.1 | 111 | 110 | 1 | 75.0-125 | | | 0.946 | | 20 |
| *(T) Barium-133* | | *90.1* | | | *79.0* | *69.9* | | | | | | | |

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

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

## Abbreviations and Definitions

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

## Qualifier Description

| 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 | LAO000356 |
| 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.

A112

Internal Transfer Chain of Custody

Pace Analytical
www.pacelabs.com

State of Origin: IL
Cert. Needed: [X] YES [ ] NO

Owner Received Date: 5/10/2023
Results Requ By: 5/28/2023

GE02539 Workorder Name: VISTRA - DUCK CREEK

| Report To: | Subcontract To: |
|---|---|
| Gail Schindler<br>Pace Analytical - IL/MO<br>2231 W. Altorfer Drive<br>Peoria, IL 61615<br>800-752-6651 | Pace Analytical - Mt Juliet<br>12065 Lebanon Rd<br>Mt Juliet TN 37122 |

| Item | Sample ID | Sample Type | Collect Date/Time | Lab ID | Matrix | Preserved Containers HNO3 | Requested Analysis Radium 226 | Radium 228 | LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|
| 1 | X301 | GRAB | 5/10/2023 15:43 | GE02539-01 | LCHT | X | X | X | L1617726 -01 |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| | | | | | | | | | |

| Transfers | Date/Time | Reveived By | Date/Time | Comments |
|---|---|---|---|---|
| 1 | 5/11/23 1415 | | | Needs 226, 228 and combined<br>Include QC summary and edd<br>10 day TAT |
| 2 | | | | |
| 3 | | Hanby Robertson | 5/18/23 0915 | |

Cooler Temperature on Receipt _____ °C | Custody Seal Y or N | Received on Ice Y or N | Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

FMT-ALL-C-002rev.00 24March2009 Page 1 of 1

Sample Receipt Checklist

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

L1617726

Pace Analytical
www.pacelabs.com

Ship to :
Pace Analytical Services, LLC
12065 Lebanon Rd
Mt Juliet TN 37122

(615)758-5858

INTER_LABORATORY WORK ORDER # GE02539
(To be complete by sending lab)

| | |
|---|---|
| Sending Project No: | GE02539 |
| Receiving Project No: | |
| Check Box for Consolidated Invoice: | |
| Date Prepared: | 5/17/2023 |
| REQUESTED COMPLETION DATE: | 5/28/2023 |

| | | | |
|---|---|---|---|
| Sending Region | IR72-IL/MO | Sending Project Mgr. | Gail Schindler |
| Receiving Region | MT JULIET | External Client | VISTRA - DUCK CREEK |
| State of Sample Origin | IL | QC Deliverable | **STD Report** |

**All questions should be addressed to sending project manager.**

Requested Reportable Units _____ Report Wet or Dry Weight? _____ Cert Needed: IL

| WORK REQUESTED | | | | | | |
|---|---|---|---|---|---|---|
| **Method Description** | **Container Type** | **Quantity of** | **Preservative** | **Quantity of** | **Unit Price** | **Amount** |
| Radium 226 | | 1 | | 1 | $121.05 | $121.05 |
| Radium 228 | | 1 | | 1 | $121.05 | $121.05 |
| | | 1 | | 1 | | $0.00 |
| | | | | | **TOTAL** | $242.10 |

**Special Requirements:** Report as 226, 228 & combined 226/228. Include QC summary & edd

| Receiving Region Department | Acctg. Code | Totals from above | Revenue Allocation | |
|---|---|---|---|---|
| | | | Receiving Region (80%) | Client Services Dept. |
| radiological | 38 | $242.10 | $193.68 | $48.42 |
| | | | | |
| | | | | |
| | | TOTAL | $193.68 | $48.42 |

* Custom Revenue Allocation

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region: [ ] Yes [X] No

CONFIRMATION OF WORK COMPLETED

Date Completed: _____ Receiving Project Manager: _____

Original sent to the receiving lab - Copy kept at the sending lab.
When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

# SUBCONTRACT ORDER
## Transfer Chain of Custody

**Pace Analytical Services, LLC**

**GE02539**

L1617726

**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:** GE02539-01
**Name:** X301

**Sampled:** 05/10/23 15:43
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/26/23 16:00 | 11/06/23 15:43 | |

**Please email results to Gail Schindler at gail.schindler@pacelabs.com**

Date Shipped: 5/17/23 Total # of Containers: 1 Sample Origin (State): IL PO #: —

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

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| [signature] | 5/17/23 1415 | | |
| | | | |

| | |
|---|---|
| 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 |

L1617726

| Tracking Numbers | NS A7 Temperature |
|---|---|
| 6319 5998 8690 | 19.3±0=19.3 |
| 6319 5998 8715 | 17.3±0=17.3 |
| 6319 5998 8726 | 19.4±0=19.4 |
| 6319 5998 8704 | 13.1±0=13.1 |
| 6319 5998 8689 | 17.6±0=17.6 |
| | |

Pace Analytical®

# ANALYTICAL REPORT

June 19, 2023



## Pace IR - Peoria, IL

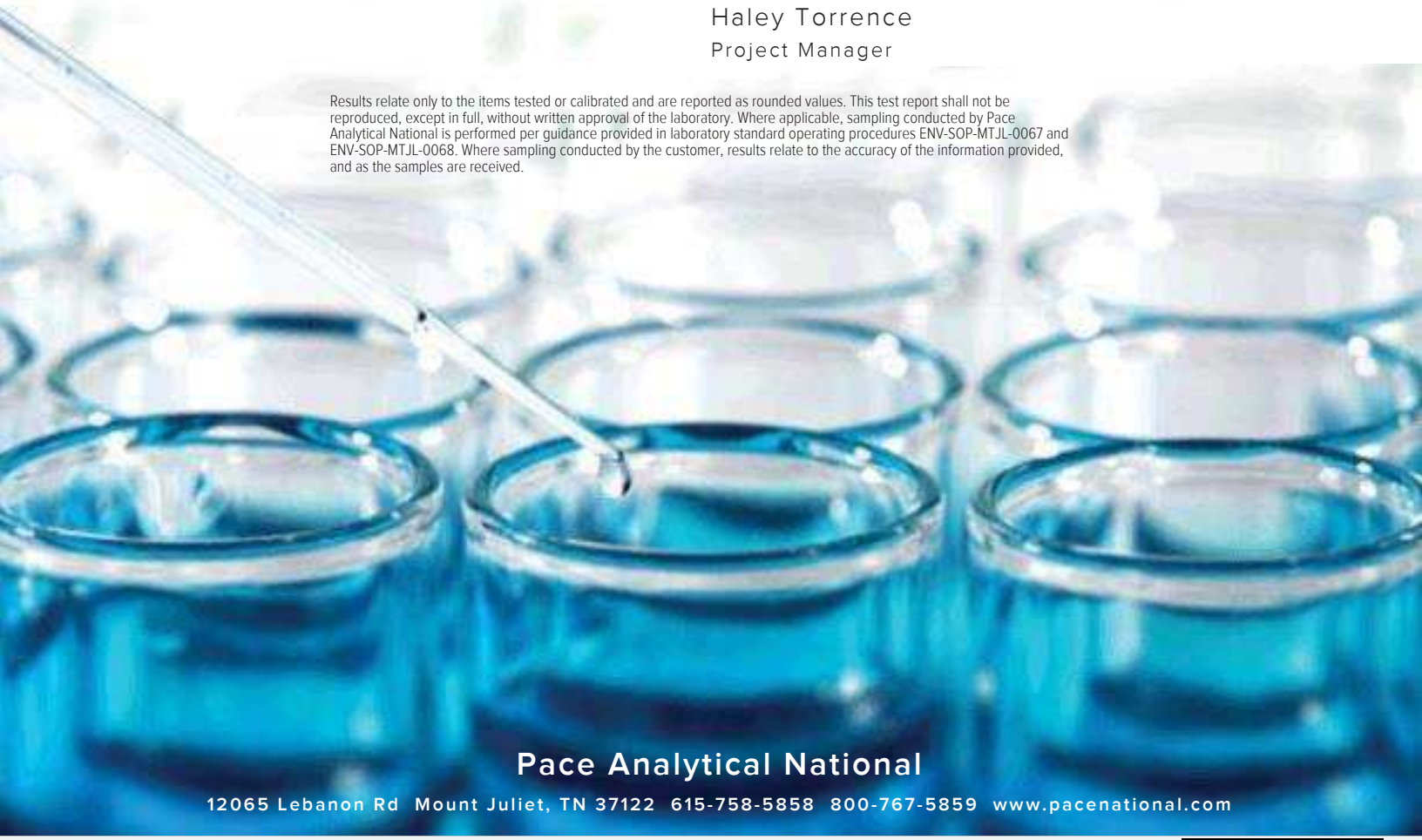
| | |
|---|---|
| Sample Delivery Group: | L1617727 |
| Samples Received: | 05/18/2023 |
| Project Number: | GE02656 |
| Description: | Vistra-Duck Creek |
| Site: | 001 |
| Report To: | Gail Schindler<br>2231 W. Altorfer Drive<br>Peoria, IL 61615 |

Entire Report Reviewed By:

Haley Torrence

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

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# SAMPLE SUMMARY

## BA01 L1617727-01 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/11/23 13:33 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2072260 | 1 | 06/06/23 11:11 | 06/10/23 08:55 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |

## BA04 L1617727-02 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/11/23 11:40 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2072260 | 1 | 06/06/23 11:11 | 06/10/23 08:55 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |

## G57S L1617727-03 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/11/23 15:22 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2072260 | 1 | 06/06/23 11:11 | 06/10/23 08:55 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |

## G64S L1617727-04 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/11/23 15:11 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2072260 | 1 | 06/06/23 11:11 | 06/10/23 08:55 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |

## EB-4 L1617727-05 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/11/23 16:00 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2072260 | 1 | 06/06/23 11:11 | 06/10/23 08:55 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |

# CASE NARRATIVE

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

Haley Torrence
Project Manager

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.0869 | U | 0.200 | 0.359 | 06/10/2023 08:55 | WG2072260 |
| *(T) Barium* | *113* | | | *30.0-143* | *06/10/2023 08:55* | WG2072260 |
| *(T) Yttrium* | *135* | | | *30.0-136* | *06/10/2023 08:55* | WG2072260 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.829 | | 0.447 | 0.508 | 06/14/2023 16:23 | WG2072628 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.742 | | 0.400 | 0.359 | 06/14/2023 16:23 | WG2072628 |
| *(T) Barium-133* | *76.2* | | | *30.0-143* | *06/14/2023 16:23* | WG2072628 |

BA04 SAMPLE RESULTS - 02

Collected date/time: 05/11/23 11:40 L1617727

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | -0.0966 | U | 0.286 | 0.513 | 06/10/2023 08:55 | WG2072260 |
| *(T) Barium* | *99.1* | | | *30.0-143* | *06/10/2023 08:55* | WG2072260 |
| *(T) Yttrium* | *119* | | | *30.0-136* | *06/10/2023 08:55* | WG2072260 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.152 | U | 0.335 | 0.559 | 06/14/2023 16:23 | WG2072628 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.152 | J | 0.174 | 0.223 | 06/14/2023 16:23 | WG2072628 |
| *(T) Barium-133* | *73.5* | | | *30.0-143* | *06/14/2023 16:23* | WG2072628 |

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 pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.290 | J | 0.220 | 0.387 | 06/10/2023 08:55 | WG2072260 |
| *(T) Barium* | *104* | | | *30.0-143* | *06/10/2023 08:55* | WG2072260 |
| *(T) Yttrium* | *118* | | | *30.0-136* | *06/10/2023 08:55* | WG2072260 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.432 | J | 0.287 | 0.467 | 06/14/2023 16:23 | WG2072628 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.143 | J | 0.184 | 0.261 | 06/14/2023 16:23 | WG2072628 |
| *(T) Barium-133* | *93.3* | | | *30.0-143* | *06/14/2023 16:23* | WG2072628 |

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | -0.231 | U | 0.242 | 0.441 | 06/10/2023 08:55 | WG2072260 |
| *(T) Barium* | *120* | | | *30.0-143* | *06/10/2023 08:55* | WG2072260 |
| *(T) Yttrium* | *107* | | | *30.0-136* | *06/10/2023 08:55* | WG2072260 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.232 | J | 0.306 | 0.484 | 06/14/2023 16:23 | WG2072628 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.232 | | 0.187 | 0.200 | 06/14/2023 16:23 | WG2072628 |
| *(T) Barium-133* | *88.7* | | | *30.0-143* | *06/14/2023 16:23* | WG2072628 |

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | -0.399 | U | 0.263 | 0.485 | 06/10/2023 08:55 | WG2072260 |
| *(T) Barium* | *115* | | | *30.0-143* | *06/10/2023 08:55* | WG2072260 |
| *(T) Yttrium* | *102* | | | *30.0-136* | *06/10/2023 08:55* | WG2072260 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.000 | U | 0.298 | 0.590 | 06/14/2023 16:23 | WG2072628 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | -0.0343 | U | 0.141 | 0.336 | 06/14/2023 16:23 | WG2072628 |
| *(T) Barium-133* | *75.0* | | | *30.0-143* | *06/14/2023 16:23* | WG2072628 |

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

# QUALITY CONTROL SUMMARY

L1617727-01,02,03,04,05

## Method Blank (MB)

(MB) R3935700-1 06/10/23 08:55

| Analyte | MB Result pCi/l | MB Qualifier | MB Uncertainty + / - | MB MDA pCi/l |
|---|---|---|---|---|
| Radium-228 | -0.0977 | U | 0.152 | 0.279 |
| *(T) Barium* | *114* | | *114* | |
| *(T) Yttrium* | *93.4* | | *93.4* | |

## L1617729-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1617729-01 06/10/23 08:55 • (DUP) R3935700-5 06/10/23 08:55

| Analyte | Original Result pCi/l | Original Uncertainty + / - | Original MDA pCi/l | DUP Result pCi/l | DUP Uncertainty + / - | DUP MDA pCi/l | Dilution | DUP RPD % | DUP RER | DUP Qualifier | DUP RPD Limits % | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 1.74 | 0.333 | 0.547 | 0.290 | 0.402 | 0.547 | 1 | 143 | 2.78 | U | 20 | 3 |
| *(T) Barium* | *81.8* | | | *86.3* | *86.3* | | | | | | | |
| *(T) Yttrium* | *139* | | | *132* | *132* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3935700-2 06/10/23 08:55

| Analyte | Spike Amount pCi/l | LCS Result pCi/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Radium-228 | 5.00 | 4.57 | 91.5 | 80.0-120 | |
| *(T) Barium* | | | *110* | | |
| *(T) Yttrium* | | | *95.4* | | |

## L1617726-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617726-01 06/10/23 08:55 • (MS) R3935700-3 06/10/23 08:55 • (MSD) R3935700-4 06/10/23 08:55

| 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 | 0.0209 | 15.4 | 14.2 | 91.8 | 84.9 | 1 | 70.0-130 | | | 7.78 | | 20 |
| *(T) Barium* | | *114* | | | *120* | *116* | | | | | | | |
| *(T) Yttrium* | | *105* | | | *101* | *109* | | | | | | | |

# QUALITY CONTROL SUMMARY

WG2072828
Radiochemistry by Method SM7500Ra B-M L1617727-01,02,03,04,05

## Method Blank (MB)

(MB) R3937863-1 06/14/23 16:23

| Analyte | MB Result pCi/l | MB Qualifier | MB Uncertainty + / - pCi/l | MB MDA pCi/l |
|---|---|---|---|---|
| Radium-226 | 0.0613 | J | 0.0908 | 0.136 |
| *(T) Barium-133* | *47.6* | | *47.6* | |

## L1617727-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1617727-01 06/14/23 16:23 • (DUP) R3937863-5 06/14/23 16:23

| Analyte | Original Result pCi/l | Original Uncertainty + / - | Original MDA pCi/l | DUP Result pCi/l | DUP Uncertainty + / - | DUP MDA pCi/l | Dilution | DUP RPD % | DUP RER | DUP Qualifier | DUP RPD Limits % | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.742 | 0.400 | 0.359 | 0.496 | 0.326 | 0.359 | 1 | 39.8 | 0.477 | | 20 | 3 |
| *(T) Barium-133* | *76.2* | | | *83.9* | *83.9* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3937863-2 06/14/23 16:23

| Analyte | Spike Amount pCi/l | LCS Result pCi/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Radium-226 | 5.01 | 5.91 | 118 | 80.0-120 | |
| *(T) Barium-133* | | | *61.3* | | |

## L1617729-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617729-03 06/14/23 16:23 • (MS) R3937863-3 06/14/23 16:23 • (MSD) R3937863-4 06/14/23 16:23

| 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 | 0.0663 | 22.3 | 22.1 | 111 | 110 | 1 | 75.0-125 | | | 0.946 | | 20 |
| *(T) Barium-133* | | *90.1* | | | *79.0* | *69.9* | | | | | | | |

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

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

## Abbreviations and Definitions

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

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

# ACCREDITATIONS & LOCATIONS

## 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 | LAO000356 |
| 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.

A111

Internal Transfer Chain of Custody

Pace Analytical®
www.pacelabs.com

State of Origin: IL
Cert. Needed: [X] YES [ ] NO

GE02656 **Workorder Name:** VISTRA - DUCK CREEK **Owner Received Date:** 5/11/2023 **Results Requ By:** 5/28/2023

| Report To: | Subcontract To: |
|---|---|
| Gail Schindler | |
| Pace Analytical - IL/MO | Pace Analytical - Mt Juliet |
| 2231 W. Altorfer Drive | 12065 Lebanon Rd |
| Peoria, IL 61615 | Mt Juliet TN 37122 |
| 800-752-6651 | |

| Item | Sample ID | Sample Type | Collect Date/Time | Lab ID | Matrix | Preserved Containers HNO3 | Requested Analysis Radium 226 | Radium 228 | LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|
| 1 | BA01 | GRAB | 5/11/2023 13:33 | GE02656-01 | GW | X | X | X | L617727-01 |
| 2 | BA04 | GRAB | 5/11/2023 11:40 | GE02656-02 | GW | X | X | X | -02 |
| 3 | G57S | GRAB | 5/11/2023 15:22 | GE02656-03 | GW | X | X | X | -03 |
| 4 | G64S | GRAB | 5/11/2023 15:11 | GE02656-04 | GW | X | X | X | -04 |
| 5 | EB-4 | GRAB | 5/11/2023 16:00 | GE02656-05 | DI | X | X | X | -05 |

| Transfers | 3/14/2023 14:31 | Date/Time | Reveived By | Date/Time | Comments |
|---|---|---|---|---|---|
| 1 | | 5/17/23 1415 | | | Needs 226, 228 and combined |
| 2 | | | | | Include QC summary and edd |
| 3 | | | Hailey Rolston | 5/18/23 0915 | 10 day TAT |

| Cooler Temperature on Receipt _____ °C | Custody Seal Y or N | Received on Ice Y or N | Sample Intact Y or N |
|---|---|---|---|
| | 0 | 0 | 0 |

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.



Sample Receipt Checklist

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

L1617727

Pace Analytical
www.pacelabs.com

Ship to :
Pace Analytical Services, LLC
12065 Lebanon Rd
Mt Juliet TN 37122

(615)758-5858

INTER_LABORATORY WORK ORDER # GE02656
(To be complete by sending lab)

| | |
|---|---|
| Sending Project No: | GE02656 |
| Receiving Project No: | |
| Check Box for Consolidated Invoice: | |
| Date Prepared: | 5/17/2023 |
| REQUESTED COMPLETION DATE: | 5/28/2023 |

| | | | |
|---|---|---|---|
| Sending Region | IR72-IL/MO | Sending Project Mgr. | Gail Schindler |
| Receiving Region | MT JULIET | External Client | VISTRA - DUCK CREEK |
| State of Sample Origin | IL | QC Deliverable | **STD Report** |

**All questions should be addressed to sending project manager.**

Requested Reportable Units _____ Report Wet or Dry Weight? _____ Cert Needed: IL

| WORK REQUESTED | | | | | | |
|---|---|---|---|---|---|---|
| Method Description | Container Type | Quantity of | Preservative | Quantity of | Unit Price | Amount |
| Radium 226 | | 5 | | 5 | $121.05 | $605.25 |
| Radium 228 | | 5 | | 5 | $121.05 | $605.25 |
| | | 1 | | 1 | | $0.00 |
| | | | | | TOTAL | $1,210.50 |

**Special Requirements:** Report as 226, 228 & combined 226/228. Include QC summary & edd

| Receiving Reqion Department | Acctg. Code | Totals from above | Revenue Allocation | |
|---|---|---|---|---|
| | | | Receiving Region (80%) | Client Services Dept. |
| radiological | 38 | $1,210.50 | $968.40 | $242.10 |
| | | | | |
| | | | | |
| | | TOTAL | $968.40 | $242.10 |

* Custom Revenue Allocation

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region: [ ] Yes [X] No

CONFIRMATION OF WORK COMPLETED

Date Completed: _____ Receiving Project Manager: _____

Original sent to the receiving lab - Copy kept at the sending lab.

When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

FMT-ALL-C-001 rev.00 24March2009 Page 1 of 1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

# SUBCONTRACT ORDER
## Transfer Chain of Custody

**Pace Analytical Services, LLC**

**GE02656**

U617727

**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:** GE02656-01
**Name:** BA01

**Sampled:** 05/11/23 13:33
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/26/23 16:00 | 11/07/23 13:33 | |

**Sample:** GE02656-02
**Name:** BA04

**Sampled:** 05/11/23 11:40
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/26/23 16:00 | 11/07/23 11:40 | |

**Sample:** GE02656-03
**Name:** G57S

**Sampled:** 05/11/23 15:22
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/26/23 16:00 | 11/07/23 15:22 | |

**Sample:** GE02656-04
**Name:** G64S

**Sampled:** 05/11/23 15:11
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/26/23 16:00 | 11/07/23 15:11 | |

**Sample:** GE02656-05
**Name:** EB-4

**Sampled:** 05/11/23 16:00
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/26/23 16:00 | 11/07/23 16:00 | |

# SUBCONTRACT ORDER
## Transfer Chain of Custody

**Pace Analytical Services, LLC**

**GE02656**

L1617727

**Please email results to Gail Schindler at gail.schindler@pacelabs.com**

Date Shipped: 5/17/23 Total # of Containers: 5 Sample Origin (State): IL PO #: —

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

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| [signature] | 5/17/23 1415 | | |
| | | | |

| | |
|---|---|
| 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 |

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

L1617727

| Tracking Numbers | NS A7 Temperature |
|---|---|
| 6319 5998 8690 | 19.3±0=19.3 |
| 6319 5998 8715 | 17.3±0=17.3 |
| 6319 5998 8726 | 19.4±0=19.4 |
| 6319 5998 8704 | 13.1±0=13.1 |
| 6319 5998 8689 | 17.6±0=17.6 |
| | |

Pace Analytical®

# ANALYTICAL REPORT

June 19, 2023



## Pace IR - Peoria, IL

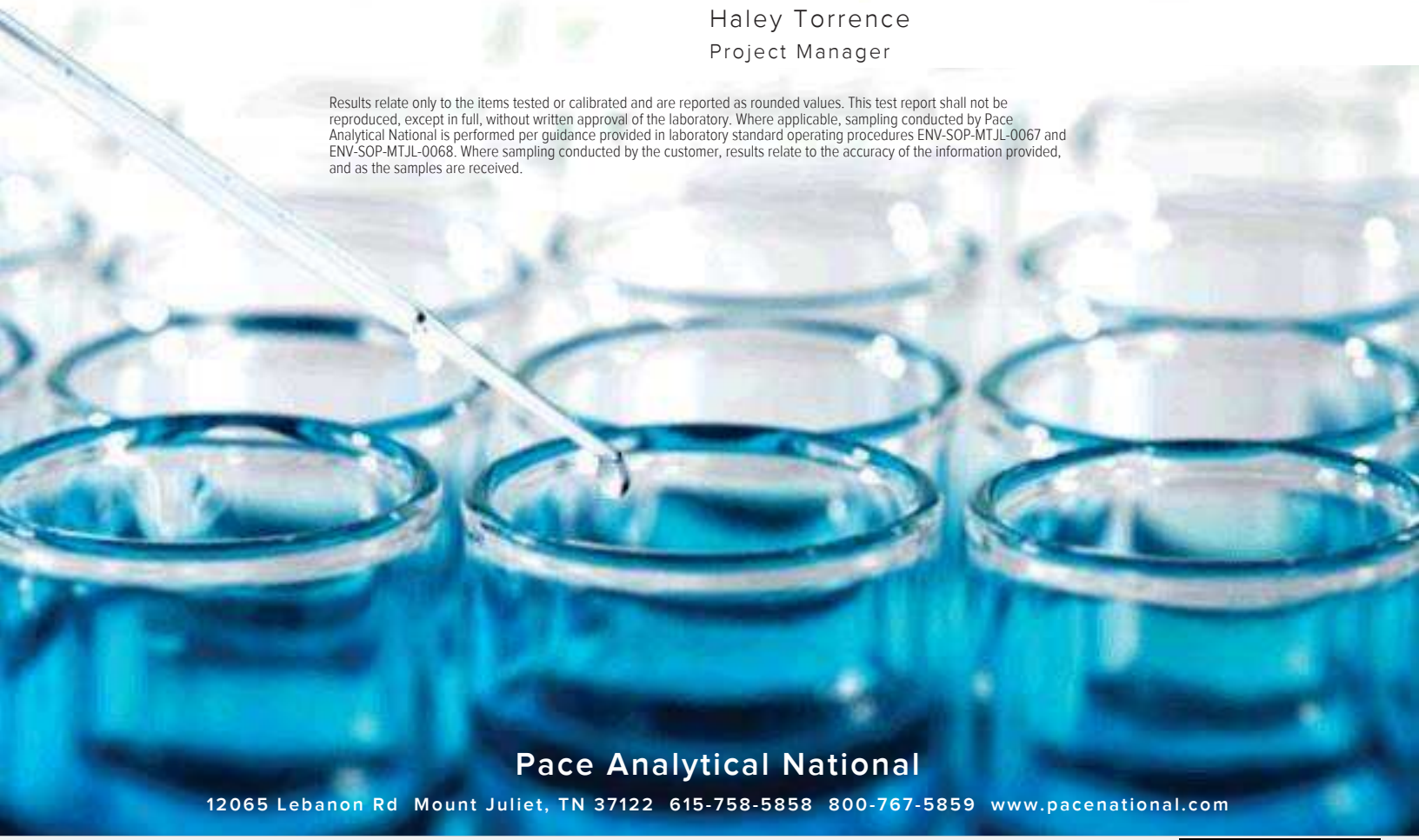
| | |
|---|---|
| Sample Delivery Group: | L1617729 |
| Samples Received: | 05/18/2023 |
| Project Number: | GE02775 |
| Description: | Vistra-Duck Creek |
| Site: | 001 |
| Report To: | Gail Schindler<br>2231 W. Altorfer Drive<br>Peoria, IL 61615 |

Entire Report Reviewed By:

Haley Torrence

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.



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# SAMPLE SUMMARY

## BA05 L1617729-01 Non-Potable Water

Collected by | Collected date/time 05/12/23 10:50 | Received date/time 05/18/23 09:15

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2072260 | 1 | 06/06/23 11:11 | 06/10/23 08:55 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |

## BA06 L1617729-02 Non-Potable Water

Collected by | Collected date/time 05/12/23 12:19 | Received date/time 05/18/23 09:15

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2072260 | 1 | 06/06/23 11:11 | 06/10/23 08:55 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |

## G54L L1617729-03 Non-Potable Water

Collected by | Collected date/time 05/12/23 12:20 | Received date/time 05/18/23 09:15

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2072260 | 1 | 06/06/23 11:11 | 06/10/23 08:55 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |

## G54S L1617729-04 Non-Potable Water

Collected by | Collected date/time 05/12/23 13:04 | Received date/time 05/18/23 09:15

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2072260 | 1 | 06/06/23 11:11 | 06/10/23 08:55 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |

## G54S DUP L1617729-05 Non-Potable Water

Collected by | Collected date/time 05/12/23 13:04 | Received date/time 05/18/23 09:15

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2072260 | 1 | 06/06/23 11:11 | 06/10/23 08:55 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |

## G60L L1617729-06 Non-Potable Water

Collected by | Collected date/time 05/12/23 10:48 | Received date/time 05/18/23 09:15

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2072260 | 1 | 06/06/23 11:11 | 06/10/23 08:55 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |

# SAMPLE SUMMARY

## G60S L1617729-07 Non-Potable Water

| | Collected by | Collected date/time | Received date/time |
|---|---|---|---|
| | | 05/12/23 11:00 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2072260 | 1 | 06/06/23 11:11 | 06/10/23 08:55 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |

## EB-7 L1617729-08 Non-Potable Water

| | Collected by | Collected date/time | Received date/time |
|---|---|---|---|
| | | 05/12/23 12:45 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2072260 | 1 | 06/06/23 11:11 | 06/10/23 08:55 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |

# CASE NARRATIVE

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

Haley Torrence

Haley Torrence
Project Manager

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 1.74 | | 0.333 | 0.547 | 06/10/2023 08:55 | WG2072260 |
| *(T) Barium* | *81.8* | | | *30.0-143* | *06/10/2023 08:55* | WG2072260 |
| *(T) Yttrium* | *139* | C1 | | *30.0-136* | *06/10/2023 08:55* | WG2072260 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 2.07 | | 0.425 | 0.628 | 06/14/2023 16:23 | WG2072628 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.326 | | 0.264 | 0.309 | 06/14/2023 16:23 | WG2072628 |
| *(T) Barium-133* | *90.3* | | | *30.0-143* | *06/14/2023 16:23* | WG2072628 |

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.683 | | 0.233 | 0.398 | 06/10/2023 08:55 | WG2072260 |
| *(T) Barium* | *101* | | | *30.0-143* | *06/10/2023 08:55* | WG2072260 |
| *(T) Yttrium* | *134* | | | *30.0-136* | *06/10/2023 08:55* | WG2072260 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 1.11 | | 0.420 | 0.577 | 06/14/2023 16:23 | WG2072628 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.426 | | 0.349 | 0.418 | 06/14/2023 16:23 | WG2072628 |
| *(T) Barium-133* | *81.8* | | | *30.0-143* | *06/14/2023 16:23* | WG2072628 |

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 pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.429 | | 0.241 | 0.420 | 06/10/2023 08:55 | WG2072260 |
| *(T) Barium* | *121* | | | *30.0-143* | *06/10/2023 08:55* | WG2072260 |
| *(T) Yttrium* | *115* | | | *30.0-136* | *06/10/2023 08:55* | WG2072260 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.495 | J | 0.295 | 0.517 | 06/14/2023 16:23 | WG2072628 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.0663 | U | 0.170 | 0.301 | 06/14/2023 16:23 | WG2072628 |
| *(T) Barium-133* | *90.1* | | | *30.0-143* | *06/14/2023 16:23* | WG2072628 |

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.749 | | 0.274 | 0.469 | 06/10/2023 08:55 | WG2072260 |
| *(T) Barium* | *114* | | | *30.0-143* | *06/10/2023 08:55* | WG2072260 |
| *(T) Yttrium* | *138* | C1 | | *30.0-136* | *06/10/2023 08:55* | WG2072260 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.881 | | 0.335 | 0.551 | 06/14/2023 16:23 | WG2072628 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.131 | J | 0.192 | 0.289 | 06/14/2023 16:23 | WG2072628 |
| *(T) Barium-133* | *86.3* | | | *30.0-143* | *06/14/2023 16:23* | WG2072628 |

# G54S DUP SAMPLE RESULTS - 05

Collected date/time: 05/12/23 13:04 L1617729

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | -0.396 | U | 0.285 | 0.529 | 06/10/2023 08:55 | WG2072260 |
| *(T) Barium* | *114* | | | *30.0-143* | *06/10/2023 08:55* | WG2072260 |
| *(T) Yttrium* | *94.8* | | | *30.0-136* | *06/10/2023 08:55* | WG2072260 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.229 | U | 0.426 | 0.700 | 06/14/2023 16:23 | WG2072628 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.229 | J | 0.317 | 0.459 | 06/14/2023 16:23 | WG2072628 |
| *(T) Barium-133* | *65.7* | | | *30.0-143* | *06/14/2023 16:23* | WG2072628 |

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | -0.394 | U | 0.220 | 0.414 | 06/10/2023 08:55 | WG2072260 |
| *(T) Barium* | *113* | | | *30.0-143* | *06/10/2023 08:55* | WG2072260 |
| *(T) Yttrium* | *119* | | | *30.0-136* | *06/10/2023 08:55* | WG2072260 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.209 | J | 0.309 | 0.498 | 06/14/2023 16:23 | WG2072628 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.209 | J | 0.217 | 0.276 | 06/14/2023 16:23 | WG2072628 |
| *(T) Barium-133* | *88.5* | | | *30.0-143* | *06/14/2023 16:23* | WG2072628 |

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.528 | | 0.297 | 0.517 | 06/10/2023 08:55 | WG2072260 |
| *(T) Barium* | *108* | | | *30.0-143* | *06/10/2023 08:55* | WG2072260 |
| *(T) Yttrium* | *150* | C1 | | *30.0-136* | *06/10/2023 08:55* | WG2072260 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.911 | | 0.467 | 0.689 | 06/14/2023 16:23 | WG2072628 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.383 | J | 0.360 | 0.456 | 06/14/2023 16:23 | WG2072628 |
| *(T) Barium-133* | *62.1* | | | *30.0-143* | *06/14/2023 16:23* | WG2072628 |

# EB-7 SAMPLE RESULTS - 08

Collected date/time: 05/12/23 13:45 L1617729

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.0250 | U | 0.235 | 0.425 | 06/10/2023 08:55 | WG2072260 |
| *(T) Barium* | *108* | | | *30.0-143* | *06/10/2023 08:55* | WG2072260 |
| *(T) Yttrium* | *127* | | | *30.0-136* | *06/10/2023 08:55* | WG2072260 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.0799 | U | 0.279 | 0.512 | 06/14/2023 16:23 | WG2072628 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.0550 | U | 0.150 | 0.285 | 06/14/2023 16:23 | WG2072628 |
| *(T) Barium-133* | *63.2* | | | *30.0-143* | *06/14/2023 16:23* | WG2072628 |

# QUALITY CONTROL SUMMARY

WG2072260

Radiochemistry by Method 904/9320 L1617729-01,02,03,04,05,06,07,08

## Method Blank (MB)

(MB) R3935700-1 06/10/23 08:55

| Analyte | MB Result pCi/l | MB Qualifier | MB Uncertainty + / - pCi/l | MB MDA pCi/l |
|---|---|---|---|---|
| Radium-228 | -0.0977 | U | 0.152 | 0.279 |
| *(T) Barium* | *114* | | *114* | |
| *(T) Yttrium* | *93.4* | | *93.4* | |

## L1617729-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1617729-01 06/10/23 08:55 • (DUP) R3935700-5 06/10/23 08:55

| Analyte | Original Result pCi/l | Original Uncertainty + / - | Original MDA pCi/l | DUP Result pCi/l | DUP Uncertainty + / - | DUP MDA pCi/l | Dilution | DUP RPD % | DUP RER | DUP Qualifier | DUP RPD Limits % | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 1.74 | 0.333 | 0.547 | 0.290 | 0.402 | 0.547 | 1 | 143 | 2.78 | U | 20 | 3 |
| *(T) Barium* | *81.8* | | | *86.3* | *86.3* | | | | | | | |
| *(T) Yttrium* | *139* | | | *132* | *132* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3935700-2 06/10/23 08:55

| Analyte | Spike Amount pCi/l | LCS Result pCi/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Radium-228 | 5.00 | 4.57 | 91.5 | 80.0-120 | |
| *(T) Barium* | | | *110* | | |
| *(T) Yttrium* | | | *95.4* | | |

## L1617726-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617726-01 06/10/23 08:55 • (MS) R3935700-3 06/10/23 08:55 • (MSD) R3935700-4 06/10/23 08:55

| 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 | 0.0209 | 15.4 | 14.2 | 91.8 | 84.9 | 1 | 70.0-130 | | | 7.78 | | 20 |
| *(T) Barium* | | *114* | | | *120* | *116* | | | | | | | |
| *(T) Yttrium* | | *105* | | | *101* | *109* | | | | | | | |

## Method Blank (MB)

(MB) R3937863-1 06/14/23 16:23

| Analyte | MB Result pCi/l | MB Qualifier | MB Uncertainty + / - pCi/l | MB MDA pCi/l |
|---|---|---|---|---|
| Radium-226 | 0.0613 | J | 0.0908 | 0.136 |
| *(T) Barium-133* | *47.6* | | *47.6* | |

## L1617727-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1617727-01 06/14/23 16:23 • (DUP) R3937863-5 06/14/23 16:23

| Analyte | Original Result pCi/l | Original Uncertainty + / - | Original MDA pCi/l | DUP Result pCi/l | DUP Uncertainty + / - | DUP MDA pCi/l | Dilution | DUP RPD % | DUP RER | DUP Qualifier | DUP RPD Limits % | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.742 | 0.400 | 0.359 | 0.496 | 0.326 | 0.359 | 1 | 39.8 | 0.477 | | 20 | 3 |
| *(T) Barium-133* | *76.2* | | | *83.9* | *83.9* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3937863-2 06/14/23 16:23

| Analyte | Spike Amount pCi/l | LCS Result pCi/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Radium-226 | 5.01 | 5.91 | 118 | 80.0-120 | |
| *(T) Barium-133* | | | *61.3* | | |

## L1617729-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617729-03 06/14/23 16:23 • (MS) R3937863-3 06/14/23 16:23 • (MSD) R3937863-4 06/14/23 16:23

| 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 | 0.0663 | 22.3 | 22.1 | 111 | 110 | 1 | 75.0-125 | | | 0.946 | | 20 |
| *(T) Barium-133* | | *90.1* | | | *79.0* | *69.9* | | | | | | | |

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

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

## Abbreviations and Definitions

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

## Qualifier Description

| 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. |
| 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 | LAO000356 |
| 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.

A110

Internal Transfer Chain of Custody

Pace Analytical
www.pacelabs.com

State of Origin: IL
Cert. Needed: [X] YES [ ] NO

GE02775 **Workorder Name:** VISTRA - DUCK CREEK

Owner Received Date: 5/12/2023

Results Requ By: 5/28/2023

| Report To: | Subcontract To: |
|---|---|
| Gail Schindler<br>Pace Analytical - IL/MO<br>2231 W. Altorfer Drive<br>Peoria, IL 61615<br>800-752-6651 | Pace Analytical - Mt Juliet<br>12065 Lebanon Rd<br>Mt Juliet TN 37122 |

| Item | Sample ID | Sample Type | Collect Date/Time | Lab ID | Matrix | Preserved Containers HNO3 | Requested Analysis Radium 226 | Radium 228 | LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|
| 1 | BA05 | GRAB | 5/12/2023 10:50 | GE02775-01 | GW | X | X | X | -01 |
| 2 | BA06 | GRAB | 5/12/2023 12:19 | GE02775-02 | GW | X | X | X | -02 |
| 3 | G54L | GRAB | 5/12/2023 12:20 | GE02775-03 | GW | X | X | X | -03 |
| 4 | G54S | GRAB | 5/12/2023 13:04 | GE02775-04 | GW | X | X | X | -04 |
| 5 | G54S DUP | GRAB | 5/12/2023 13:04 | GE02775-05 | GW | X | X | X | -05 |
| 6 | G60L | GRAB | 5/12/2023 10:48 | GE02775-06 | GW | X | X | X | -06 |
| 7 | G60S | GRAB | 5/12/2023 11:00 | GE02775-07 | GW | X | X | X | -07 |
| 8 | EB-7 | GRAB | 5/12/2023 12:45 | GE02775-08 | DI | X | X | X | -08 |
| | | | | | | | | | |
| | | | | | | | | | |

U687729

| Transfers | 3/14/2023 14:31 | Date/Time | Reveived By | Date/Time | Comments |
|---|---|---|---|---|---|
| 1 | | 5/17/23 1440 | | | Needs 226, 228 and combined |
| 2 | | | | | Include QC summary and edd |
| 3 | | Hailey HR 5/18 | Hailey Robertson | 5/18/23 0915 | 10 day TAT |

**Cooler Temperature on Receipt** _____ °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Sample Intact** Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.



Sample Receipt Checklist

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

Pace Analytical
www.pacelabs.com

Ship to :
Pace Analytical Services, LLC
12065 Lebanon Rd
Mt Juliet TN 37122

(615)758-5858

U607729

INTER_LABORATORY WORK ORDER # GE02775
(To be complete by sending lab)

| | |
|---|---|
| Sending Project No: | GE02775 |
| Receiving Project No: | |
| Check Box for Consolidated Invoice: | |
| Date Prepared: | 5/17/2023 |
| REQUESTED COMPLETION DATE: | 5/28/2023 |

| | | | |
|---|---|---|---|
| Sending Region | IR72-IL/MO | Sending Project Mgr. | Gail Schindler |
| Receiving Region | MT JULIET | External Client | VISTRA - DUCK CREEK |
| State of Sample Origin | IL | QC Deliverable | **STD Report** |

**All questions should be addressed to sending project manager.**

Requested Reportable Units _____ Report Wet or Dry Weight? _____ Cert Needed: IL

WORK REQUESTED

| Method Description | Container Type | Quantity of | Preservative | Quantity of | Unit Price | Amount |
|---|---|---|---|---|---|---|
| Radium 226 | | 8 | | 8 | $121.05 | $968.40 |
| Radium 228 | | 8 | | 8 | $121.05 | $968.40 |
| | | 1 | | 1 | | $0.00 |
| | | | | | **TOTAL** | $1,936.80 |

**Special Requirements:** Report as 226, 228 & combined 226/228. Include QC summary & edd

| Receiving Region Department | Acctg. Code | Totals from above | Revenue Allocation | |
|---|---|---|---|---|
| | | | Receiving Region (80%) | Client Services Dept. |
| radiological | 38 | $1,936.80 | $1,549.44 | $387.36 |
| | | | | |
| | | | | |
| * Custom Revenue Allocation | | TOTAL | $1,549.44 | $387.36 |

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region: [ ] Yes [X] No

CONFIRMATION OF WORK COMPLETED

Date Completed: _____ Receiving Project Manager: _____

Original sent to the receiving lab - Copy kept at the sending lab.

When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.



ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

# SUBCONTRACT ORDER
## Transfer Chain of Custody

**Pace Analytical Services, LLC**

**GE02775**

461729

**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:** GE02775-06
**Name:** G60L

**Sampled:** 05/12/23 10:48
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/29/23 16:00 | 11/08/23 10:48 | |

**Sample:** GE02775-07
**Name:** G60S

**Sampled:** 05/12/23 11:00
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/29/23 16:00 | 11/08/23 11:00 | |

**Sample:** GE02775-08
**Name:** EB - 7

**Sampled:** 05/12/23 12:45
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/29/23 16:00 | 11/08/23 12:45 | |

**Please email results to Gail Schindler at gail.schindler@pacelabs.com**

Date Shipped: 5/17/23 Total # of Containers: 8 Sample Origin (State): IL PO #: _____

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

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| [signature] | 5/17/23 1440 | | |
| | | | |

| | |
|---|---|
| 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 |

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

# SUBCONTRACT ORDER
## Transfer Chain of Custody

**Pace Analytical Services, LLC**

**GE02775**

L1617729

**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:** GE02775-01
**Name:** BA05

**Sampled:** 05/12/23 10:50
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/29/23 16:00 | 11/08/23 10:50 | |

**Sample:** GE02775-02
**Name:** BA06

**Sampled:** 05/12/23 12:19
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/29/23 16:00 | 11/08/23 12:19 | |

**Sample:** GE02775-03
**Name:** G54L

**Sampled:** 05/12/23 12:20
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/29/23 16:00 | 11/08/23 12:20 | |

**Sample:** GE02775-04
**Name:** G54S

**Sampled:** 05/12/23 13:04
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/29/23 16:00 | 11/08/23 13:04 | |

**Sample:** GE02775-05
**Name:** G54S DUP

**Sampled:** 05/12/23 13:04
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/29/23 16:00 | 11/08/23 13:04 | |

L16772

| Tracking Numbers | NS A7 Temperature |
|---|---|
| 6319 5998 8690 | 19.3±0=19.3 |
| 6319 5998 8715 | 17.3±0=17.3 |
| 6319 5998 8726 | 19.4±0=19.4 |
| 6319 5998 8704 | 13.1±0=13.1 |
| 6319 5998 8689 | 17.6±0=17.6 |
| | |

# ANALYTICAL REPORT

June 23, 2023



## Pace IR - Peoria, IL

| | |
|---|---|
| Sample Delivery Group: | L1617724 |
| Samples Received: | 05/18/2023 |
| Project Number: | GE03000 |
| Description: | Vistra-Duck Creek |
| Site: | 001 |
| Report To: | Gail Schindler |
| | 2231 W. Altorfer Drive |
| | Peoria, IL 61615 |

Entire Report Reviewed By:

Haley Torrence

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

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# SAMPLE SUMMARY

## BA02 L1617724-01 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/15/23 11:23 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |

## G02S L1617724-02 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/15/23 15:18 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |

## G50S L1617724-03 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/15/23 12:56 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |

## G51S L1617724-04 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/15/23 11:26 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |

## EB #8 L1617724-05 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/15/23 17:50 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |

## EB #9 L1617724-06 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/15/23 17:50 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |

# SAMPLE SUMMARY

## BA02G64L L1617724-07 Non-Potable Water

| | Collected by | Collected date/time | Received date/time |
|---|---|---|---|
| | | 05/15/23 15:00 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |

## BA02OM25S L1617724-08 Non-Potable Water

| | Collected by | Collected date/time | Received date/time |
|---|---|---|---|
| | | 05/15/23 13:14 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |

## OM12 L1617724-09 Non-Potable Water

| | Collected by | Collected date/time | Received date/time |
|---|---|---|---|
| | | 05/15/23 14:05 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |

## OM21 L1617724-10 Non-Potable Water

| | Collected by | Collected date/time | Received date/time |
|---|---|---|---|
| | | 05/15/23 13:24 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |

## OM23D L1617724-11 Non-Potable Water

| | Collected by | Collected date/time | Received date/time |
|---|---|---|---|
| | | 05/15/23 16:00 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |

## OM11 L1617724-12 Non-Potable Water

| | Collected by | Collected date/time | Received date/time |
|---|---|---|---|
| | | 05/15/23 12:33 | 05/18/23 09:15 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |

# SAMPLE SUMMARY

## OM14D L1617724-13 Non-Potable Water

| | | | Collected by | Collected date/time | Received date/time | |
|---|---|---|---|---|---|---|
| | | | | 05/15/23 11:35 | 05/18/23 09:15 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |

## OM19 L1617724-14 Non-Potable Water

| | | | Collected by | Collected date/time | Received date/time | |
|---|---|---|---|---|---|---|
| | | | | 05/15/23 15:28 | 05/18/23 09:15 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2071924 | 1 | 06/05/23 19:10 | 06/09/23 20:54 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072626 | 1 | 06/14/23 08:51 | 06/16/23 00:06 | RGT | Mt. Juliet, TN |

## OM20 L1617724-15 Non-Potable Water

| | | | Collected by | Collected date/time | Received date/time | |
|---|---|---|---|---|---|---|
| | | | | 05/15/23 11:10 | 05/18/23 09:15 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2072260 | 1 | 06/06/23 11:11 | 06/10/23 08:55 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |

# CASE NARRATIVE

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

Haley Torrence
Project Manager

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.368 | J | 0.237 | 0.423 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *97.4* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *106* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.478 | J | 0.332 | 0.563 | 06/16/2023 00:06 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.110 | U | 0.233 | 0.371 | 06/16/2023 00:06 | WG2072626 |
| *(T) Barium-133* | *83.7* | | | *30.0-143* | *06/16/2023 00:06* | WG2072626 |

## Radiochemistry by Method 904/9320

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-228 | 0.824 | | 0.222 | 0.381 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *94.2* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *109* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 1.42 | | 0.394 | 0.472 | 06/16/2023 00:06 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-226 | 0.592 | | 0.325 | 0.278 | 06/16/2023 00:06 | WG2072626 |
| *(T) Barium-133* | *91.1* | | | *30.0-143* | *06/16/2023 00:06* | WG2072626 |

## Radiochemistry by Method 904/9320

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-228 | -0.256 | U | 0.399 | 0.734 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *106* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *96.8* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 0.146 | U | 0.469 | 0.823 | 06/16/2023 00:06 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-226 | 0.146 | J | 0.247 | 0.372 | 06/16/2023 00:06 | WG2072626 |
| *(T) Barium-133* | *81.6* | | | *30.0-143* | *06/16/2023 00:06* | WG2072626 |

## Radiochemistry by Method 904/9320

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-228 | 0.687 | | 0.223 | 0.387 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *117* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *120* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 1.07 | | 0.380 | 0.531 | 06/16/2023 00:06 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-226 | 0.387 | | 0.308 | 0.363 | 06/16/2023 00:06 | WG2072626 |
| *(T) Barium-133* | *80.7* | | | *30.0-143* | *06/16/2023 00:06* | WG2072626 |

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.156 | U | 0.246 | 0.447 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *107* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *98.7* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.234 | U | 0.325 | 0.575 | 06/16/2023 00:06 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.0781 | U | 0.212 | 0.362 | 06/16/2023 00:06 | WG2072626 |
| *(T) Barium-133* | *77.9* | | | *30.0-143* | *06/16/2023 00:06* | WG2072626 |

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | -0.0948 | U | 0.263 | 0.484 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *102* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *104* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.0946 | U | 0.337 | 0.606 | 06/16/2023 00:06 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.0946 | U | 0.211 | 0.365 | 06/16/2023 00:06 | WG2072626 |
| *(T) Barium-133* | *73.9* | | | *30.0-143* | *06/16/2023 00:06* | WG2072626 |

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.627 | | 0.257 | 0.451 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *102* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *112* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.938 | | 0.373 | 0.561 | 06/16/2023 00:06 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.311 | J | 0.270 | 0.334 | 06/16/2023 00:06 | WG2072626 |
| *(T) Barium-133* | *94.4* | | | *30.0-143* | *06/16/2023 00:06* | WG2072626 |

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

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 27.8 | | 6.30 | 10.6 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *8.76* | C2 | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *115* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 27.8 | | 6.30 | 10.6 | 06/16/2023 00:06 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | -0.0337 | U | 0.104 | 0.444 | 06/16/2023 00:06 | WG2072626 |
| *(T) Barium-133* | *41.6* | | | *30.0-143* | *06/16/2023 00:06* | WG2072626 |

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

## Radiochemistry by Method 904/9320

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-228 | 1.05 | | 0.297 | 0.511 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *82.2* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *109* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 1.69 | | 0.424 | 0.568 | 06/16/2023 00:06 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-226 | 0.640 | | 0.303 | 0.248 | 06/16/2023 00:06 | WG2072626 |
| *(T) Barium-133* | *138* | | | *30.0-143* | *06/16/2023 00:06* | WG2072626 |

OM21 SAMPLE RESULTS - 10

Collected date/time: 05/15/23 13:24 L1617724

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 1.42 | | 0.310 | 0.523 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *92.6* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *97.7* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 1.53 | | 0.358 | 0.590 | 06/16/2023 00:06 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.112 | J | 0.179 | 0.274 | 06/16/2023 00:06 | WG2072626 |
| *(T) Barium-133* | *132* | | | *30.0-143* | *06/16/2023 00:06* | WG2072626 |

## Radiochemistry by Method 904/9320

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-228 | -0.103 | U | 0.293 | 0.542 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *92.1* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *120* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 0.174 | U | 0.331 | 0.566 | 06/16/2023 00:06 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-226 | 0.174 | | 0.154 | 0.164 | 06/16/2023 00:06 | WG2072626 |
| *(T) Barium-133* | *123* | | | *30.0-143* | *06/16/2023 00:06* | WG2072626 |

OR11 SAMPLE RESULTS - 12

Collected date/time: 05/15/23 13:33 L1617724

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.290 | J | 0.237 | 0.427 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *96.8* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *110* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.494 | | 0.308 | 0.492 | 06/16/2023 00:06 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.204 | J | 0.197 | 0.244 | 06/16/2023 00:06 | WG2072626 |
| *(T) Barium-133* | *121* | | | *30.0-143* | *06/16/2023 00:06* | WG2072626 |

## Radiochemistry by Method 904/9320

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-228 | -0.0375 | U | 0.314 | 0.573 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *91.1* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *108* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 0.199 | U | 0.371 | 0.626 | 06/16/2023 00:06 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-226 | 0.199 | J | 0.197 | 0.252 | 06/16/2023 00:06 | WG2072626 |
| *(T) Barium-133* | *114* | | | *30.0-143* | *06/16/2023 00:06* | WG2072626 |

OR19 SAMPLE RESULTS - 14

Collected date/time: 05/15/23 15:28 L1617724

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.588 | | 0.275 | 0.486 | 06/09/2023 20:54 | WG2071924 |
| *(T) Barium* | *87.6* | | | *30.0-143* | *06/09/2023 20:54* | WG2071924 |
| *(T) Yttrium* | *113* | | | *30.0-136* | *06/09/2023 20:54* | WG2071924 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.849 | | 0.358 | 0.560 | 06/16/2023 00:06 | WG2072626 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.261 | J | 0.229 | 0.279 | 06/16/2023 00:06 | WG2072626 |
| *(T) Barium-133* | *114* | | | *30.0-143* | *06/16/2023 00:06* | WG2072626 |

OR20 SAMPLE RESULTS - 15

Collected date/time: 05/15/23 11:10 L1617724

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.0114 | U | 0.270 | 0.484 | 06/10/2023 08:55 | WG2072260 |
| *(T) Barium* | *93.6* | | | *30.0-143* | *06/10/2023 08:55* | WG2072260 |
| *(T) Yttrium* | *132* | | | *30.0-136* | *06/10/2023 08:55* | WG2072260 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.127 | U | 0.314 | 0.538 | 06/14/2023 16:23 | WG2072628 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.115 | J | 0.160 | 0.234 | 06/14/2023 16:23 | WG2072628 |
| *(T) Barium-133* | *79.1* | | | *30.0-143* | *06/14/2023 16:23* | WG2072628 |

## Method Blank (MB)

(MB) R3937268-1 06/09/23 20:54

| Analyte | MB Result | MB Qualifier | MB Uncertainty | MB MDA |
|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l |
| Radium-228 | 0.324 | | 0.147 | 0.260 |
| *(T) Barium* | *106* | | *106* | |
| *(T) Yttrium* | *107* | | *107* | |

## L1617724-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1617724-03 06/09/23 20:54 • (DUP) R3937268-5 06/09/23 20:54

| Analyte | Original Result | Original Uncertainty | Original MDA | DUP Result | DUP Uncertainty | DUP MDA | Dilution | DUP RPD | DUP RER | DUP Qualifier | DUP RPD Limits | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | pCi/l | + / - | pCi/l | pCi/l | + / - | pCi/l | | % | | | % | |
| Radium-228 | -0.256 | 0.399 | 0.734 | 0.705 | 0.376 | 0.734 | 1 | 200 | 1.75 | | 20 | 3 |
| *(T) Barium* | *106* | | | *94.2* | *94.2* | | | | | | | |
| *(T) Yttrium* | *96.8* | | | *115* | *115* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3937268-2 06/09/23 20:54

| Analyte | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---|---|---|---|---|---|
| | pCi/l | pCi/l | % | % | |
| Radium-228 | 5.00 | 4.07 | 81.4 | 80.0-120 | |
| *(T) Barium* | | | *97.6* | | |
| *(T) Yttrium* | | | *120* | | |

## L1617720-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617720-08 06/09/23 20:54 • (MS) R3937268-3 06/09/23 20:54 • (MSD) R3937268-4 06/09/23 20:54

| Analyte | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | MS RER | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | pCi/l | pCi/l | pCi/l | pCi/l | % | % | | % | | | % | | % |
| Radium-228 | 10.0 | 0.410 | 8.66 | 9.60 | 82.5 | 91.9 | 1 | 70.0-130 | | | 10.2 | | 20 |
| *(T) Barium* | | *89.6* | | | *105* | *98.0* | | | | | | | |
| *(T) Yttrium* | | *101* | | | *118* | *106* | | | | | | | |

## Method Blank (MB)

(MB) R3935700-1 06/10/23 08:55

| Analyte | MB Result | MB Qualifier | MB Uncertainty | MB MDA |
|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l |
| Radium-228 | -0.0977 | U | 0.152 | 0.279 |
| *(T) Barium* | *114* | | *114* | |
| *(T) Yttrium* | *93.4* | | *93.4* | |

## L1617729-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1617729-01 06/10/23 08:55 • (DUP) R3935700-5 06/10/23 08:55

| Analyte | Original Result | Original Uncertainty | Original MDA | DUP Result | DUP Uncertainty | DUP MDA | Dilution | DUP RPD | DUP RER | DUP Qualifier | DUP RPD Limits | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | pCi/l | + / - | pCi/l | pCi/l | + / - | pCi/l | | % | | | % | |
| Radium-228 | 1.74 | 0.333 | 0.547 | 0.290 | 0.402 | 0.547 | 1 | 143 | 2.78 | U | 20 | 3 |
| *(T) Barium* | *81.8* | | | *86.3* | *86.3* | | | | | | | |
| *(T) Yttrium* | *139* | | | *132* | *132* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3935700-2 06/10/23 08:55

| Analyte | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---|---|---|---|---|---|
| | pCi/l | pCi/l | % | % | |
| Radium-228 | 5.00 | 4.57 | 91.5 | 80.0-120 | |
| *(T) Barium* | | | *110* | | |
| *(T) Yttrium* | | | *95.4* | | |

## L1617726-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617726-01 06/10/23 08:55 • (MS) R3935700-3 06/10/23 08:55 • (MSD) R3935700-4 06/10/23 08:55

| Analyte | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | MS RER | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | pCi/l | pCi/l | pCi/l | pCi/l | % | % | | % | | | % | | % |
| Radium-228 | 16.7 | 0.0209 | 15.4 | 14.2 | 91.8 | 84.9 | 1 | 70.0-130 | | | 7.78 | | 20 |
| *(T) Barium* | | *114* | | | *120* | *116* | | | | | | | |
| *(T) Yttrium* | | *105* | | | *101* | *109* | | | | | | | |

## Method Blank (MB)

(MB) R3940721-1 06/15/23 18:26

| Analyte | MB Result pCi/l | MB Qualifier | MB Uncertainty + / - | MB MDA pCi/l |
|---|---|---|---|---|
| Radium-226 | -0.0163 | U | 0.0422 | 0.100 |
| *(T) Barium-133* | *82.0* | | *82.0* | |

## L1617724-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1617724-01 06/16/23 00:06 • (DUP) R3940721-5 06/15/23 18:26

| Analyte | Original Result pCi/l | Original Uncertainty + / - | Original MDA pCi/l | DUP Result pCi/l | DUP Uncertainty + / - | DUP MDA pCi/l | Dilution | DUP RPD % | DUP RER | DUP Qualifier | DUP RPD Limits % | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.110 | 0.233 | 0.371 | 0.121 | 0.248 | 0.371 | 1 | 9.44 | 0.0320 | U | 20 | 3 |
| *(T) Barium-133* | *83.7* | | | *82.7* | *82.7* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3940721-2 06/15/23 18:26

| Analyte | Spike Amount pCi/l | LCS Result pCi/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Radium-226 | 5.01 | 5.69 | 114 | 80.0-120 | |
| *(T) Barium-133* | | | *80.8* | | |

## L1617720-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617720-03 06/15/23 18:26 • (MS) R3940721-3 06/15/23 18:26 • (MSD) R3940721-4 06/15/23 18:26

| 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 | 0.117 | 21.7 | 23.9 | 108 | 119 | 1 | 75.0-125 | | | 9.58 | | 20 |
| *(T) Barium-133* | | *85.5* | | | *80.8* | *86.0* | | | | | | | |

## Method Blank (MB)

(MB) R3937863-1 06/14/23 16:23

| Analyte | MB Result pCi/l | MB Qualifier | MB Uncertainty + / - pCi/l | MB MDA pCi/l |
|---|---|---|---|---|
| Radium-226 | 0.0613 | J | 0.0908 | 0.136 |
| *(T) Barium-133* | *47.6* | | *47.6* | |

## L1617727-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1617727-01 06/14/23 16:23 • (DUP) R3937863-5 06/14/23 16:23

| Analyte | Original Result pCi/l | Original Uncertainty + / - | Original MDA pCi/l | DUP Result pCi/l | DUP Uncertainty + / - | DUP MDA pCi/l | Dilution | DUP RPD % | DUP RER | DUP Qualifier | DUP RPD Limits % | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.742 | 0.400 | 0.359 | 0.496 | 0.326 | 0.359 | 1 | 39.8 | 0.477 | | 20 | 3 |
| *(T) Barium-133* | *76.2* | | | *83.9* | *83.9* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3937863-2 06/14/23 16:23

| Analyte | Spike Amount pCi/l | LCS Result pCi/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Radium-226 | 5.01 | 5.91 | 118 | 80.0-120 | |
| *(T) Barium-133* | | | *61.3* | | |

## L1617729-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617729-03 06/14/23 16:23 • (MS) R3937863-3 06/14/23 16:23 • (MSD) R3937863-4 06/14/23 16:23

| 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 | 0.0663 | 22.3 | 22.1 | 111 | 110 | 1 | 75.0-125 | | | 0.946 | | 20 |
| *(T) Barium-133* | | *90.1* | | | *79.0* | *69.9* | | | | | | | |

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

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

## Abbreviations and Definitions

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

| Qualifier | Description |
|---|---|
| C2 | Tracer recovery limits have been exceeded; values are outside lower control limits. |
| 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 | LAO000356 |
| 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.

A113

Internal Transfer Chain of Custody

Pace Analytical
www.pacelabs.com

State of Origin: IL
Cert. Needed: [X] YES [ ] NO

GE3000
~~GE02775~~

**Workorder Name:** VISTRA - DUCK CREEK

**Owner Received Date:** 5/16/2023

**Results Requ By:** 5/28/2023

| Report To: | Subcontract To: |
|---|---|
| Gail Schindler<br>Pace Analytical - IL/MO<br>2231 W. Altorfer Drive<br>Peoria, IL 61615<br>800-752-6651 | Pace Analytical - Mt Juliet<br>12065 Lebanon Rd<br>Mt Juliet TN 37122 |

| Item | Sample ID | Sample Type | Collect Date/Time | Lab ID | Matrix | Preserved Containers: HNO3 | Requested Analysis: Radium 226 | Radium 228 | LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|
| 1 | BA02 | GRAB | 5/15/2023 11:23 | GE03000-01 | GW | X | X | X | -01 |
| 2 | G02S | GRAB | 5/15/2023 15:18 | GE03000-02 | GW | X | X | X | -02 |
| 3 | G50S | GRAB | 5/15/2023 12:56 | GE03000-03 | GW | X | X | X | -03 |
| 4 | G51S | GRAB | 5/15/2023 11:26 | GE03000-04 | GW | X | X | X | -04 |
| 5 | EB #8 | GRAB | 5/15/2023 17:50 | GE03000-05 | DI | X | X | X | -05 |
| 6 | EB #9 | GRAB | 5/15/2023 17:50 | GE03000-06 | DI | X | X | X | -06 |
| 7 | G64L | GRAB | 5/15/2023 15:00 | GE03000-07 | GW | X | X | X | -07 |
| 8 | OM25S | GRAB | 5/15/2023 13:14 | GE03000-08 | GW | X | X | X | -08 |
| 9 | OM12 | GRAB | 5/15/2023 14:05 | GE03000-09 | GW | X | X | X | -09 |
| 10 | OM21 | GRAB | 5/15/2023 13:24 | GE03000-10 | GW | X | X | X | -10 |

U161724

| Transfers | 3/14/2023 14:31 | Date/Time | Reveived By | Date/Time | Comments |
|---|---|---|---|---|---|
| 1 | | 3/17/23 1500 | | | Needs 226, 228 and combined |
| 2 | | | | | Include QC summary and edd |
| 3 | | | Hailey Robertson | 5/18/23 0915 | 10 day TAT |

| Cooler Temperature on Receipt _____ °C | Custody Seal Y or N | Received on Ice Y or N | Sample Intact Y or N |
|---|---|---|---|

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.



Sample Receipt Checklist

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

Internal Transfer Chain of Custody

Pace Analytical
www.pacelabs.com

State of Origin: IL
Cert. Needed: [X] YES [ ] NO

GE 3000
~~GE02775~~

**Workorder Name:** VISTRA - DUCK CREEK

**Owner Received Date:** 5/16/2023

**Results Requ By:** 5/28/2023

| Report To: | Subcontract To: |
|---|---|
| Gail Schindler<br>Pace Analytical - IL/MO<br>2231 W. Altorfer Drive<br>Peoria, IL 61615<br>800-752-6651 | Pace Analytical - Mt Juliet<br>12065 Lebanon Rd<br>Mt Juliet TN 37122 |

| Item | Sample ID | Sample Type | Collect Date/Time | Lab ID | Matrix | Preserved Containers: HNO3 | | | | | Requested Analysis: Radium 226 | Radium 228 | | | | | | | | | | | LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | OM23D | GRAB | 5/15/2023 16:00 | GE03000-11 | GW | X | | | | | X | X | | | | | | | | | | | -11 |
| 12 | OR11 | GRAB | 5/15/2023 12:33 | GE03000-12 | GW | X | | | | | X | X | | | | | | | | | | | -12 |
| 13 | OR14D | GRAB | 5/15/2023 11:35 | GE03000-13 | GW | X | | | | | X | X | | | | | | | | | | | -13 |
| 14 | OR19 | GRAB | 5/15/2023 15:28 | GE03000-14 | GW | X | | | | | X | X | | | | | | | | | | | -14 |
| 15 | OR20 | GRAB | 5/15/2023 11:10 | GE03000-15 | GW | X | | | | | X | X | | | | | | | | | | | -15 |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |

ULd7724

| Transfers | 3/14/2023 14:31 | Date/Time | Received By | Date/Time | Comments |
|---|---|---|---|---|---|
| 1 | | | Hoolly Rotuber | 5/18/23 0915 | Needs 226, 228 and combined<br>Include QC summary and edd<br>10 day TAT |
| 2 | | | | | |
| 3 | | | | | |

| Cooler Temperature on Receipt _____ °C | Custody Seal Y or N | Received on Ice Y or N | Sample Intact Y or N |
|---|---|---|---|

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

# SUBCONTRACT ORDER
## Transfer Chain of Custody

## Pace Analytical Services, LLC

## GE03000

4617724



**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:** GE03000-01
**Name:** BA02

**Sampled:** 05/15/23 11:23
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/30/23 16:00 | 11/11/23 11:23 | |

**Sample:** GE03000-02
**Name:** G02S

**Sampled:** 05/15/23 15:18
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/30/23 16:00 | 11/11/23 15:18 | |

**Sample:** GE03000-03
**Name:** G50S

**Sampled:** 05/15/23 12:56
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/30/23 16:00 | 11/11/23 12:56 | |

**Sample:** GE03000-04
**Name:** G51S

**Sampled:** 05/15/23 11:26
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/30/23 16:00 | 11/11/23 11:26 | |

**Sample:** GE03000-05
**Name:** EB #8

**Sampled:** 05/15/23 17:50
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/30/23 16:00 | 11/11/23 17:50 | |

# SUBCONTRACT ORDER
## Transfer Chain of Custody

## Pace Analytical Services, LLC
## GE03000

U6l7724

**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:** GE03000-06
**Name:** EB #9

**Sampled:** 05/15/23 17:50
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/30/23 16:00 | 11/11/23 17:50 | |

**Sample:** GE03000-07
**Name:** G64L

**Sampled:** 05/15/23 15:00
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/30/23 16:00 | 11/11/23 15:00 | |

**Sample:** GE03000-08
**Name:** OM25S

**Sampled:** 05/15/23 13:14
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/30/23 16:00 | 11/11/23 13:14 | |

**Sample:** GE03000-09
**Name:** OM12

**Sampled:** 05/15/23 14:05
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/30/23 16:00 | 11/11/23 14:05 | |

**Sample:** GE03000-10
**Name:** OM21

**Sampled:** 05/15/23 13:24
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 1-Radium 226/228 combined | 05/30/23 16:00 | 11/11/23 13:24 | |

# SUBCONTRACT ORDER
## Transfer Chain of Custody

**Pace Analytical Services, LLC**

**GE03000**

L1617724



**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:** GE03000-11
**Name:** OM23D

**Sampled:** 05/15/23 16:00
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/30/23 16:00 | 11/11/23 16:00 | |

**Sample:** GE03000-12
**Name:** OR11

**Sampled:** 05/15/23 12:33
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/30/23 16:00 | 11/11/23 12:33 | |

**Sample:** GE03000-13
**Name:** OR14D

**Sampled:** 05/15/23 11:35
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/30/23 16:00 | 11/11/23 11:35 | |

**Sample:** GE03000-14
**Name:** OR19

**Sampled:** 05/15/23 15:28
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/30/23 16:00 | 11/11/23 15:28 | |

**Sample:** GE03000-15
**Name:** OR20

**Sampled:** 05/15/23 11:10
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 1-Radium 226/228 combined | 05/30/23 16:00 | 11/11/23 11:10 | |

# SUBCONTRACT ORDER
## Transfer Chain of Custody

**Pace Analytical Services, LLC**

**GE03000**

L1617724

**Please email results to Gail Schindler at gail.schindler@pacelabs.com**

Date Shipped: 5/17/23 Total # of Containers: 15 Sample Origin (State): IL PO #: _____

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

| | | | | | |
|---|---|---|---|---|---|
| [signature] 5/17/23 1500 | | | | Sample Temperature Upon Receipt | ____ °C |
| | | | | Sample(s) Received on Ice | Y or N |
| Relinquished By | Date/Time | Received By | Date/Time | 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 |
| Relinquished By | Date/Time | Received By | Date/Time | Date/Time Taken From Sample Bottle | Y or N |

4617724

| Tracking Numbers | NS A7 Temperature |
|---|---|
| 6319 5998 8690 | 19.3±0=19.3 |
| 6319 5998 8715 | 17.3±0=17.3 |
| 6319 5998 8726 | 19.4±0=19.4 |
| 6319 5998 8704 | 13.1±0=13.1 |
| 6319 5998 8689 | 17.6±0=17.6 |
| | |

4617724

Pace Analytical
www.pacelabs.com

Ship to :
Pace Analytical Services, LLC
12065 Lebanon Rd
Mt Juliet TN 37122

(615)758-5858

INTER_LABORATORY WORK ORDER # ~~GE02775~~ GE30

(To be complete by sending lab)

| | |
|---|---|
| Sending Project No: | ~~GE02775~~ GE30 |
| Receiving Project No: | |
| Check Box for Consolidated Invoice: | |
| Date Prepared: | 5/17/2023 |
| REQUESTED COMPLETION DATE: | 5/28/2023 |

| | | | |
|---|---|---|---|
| Sending Region | IR72-IL/MO | Sending Project Mgr. | Gail Schindler |
| Receiving Region | MT JULIET | External Client | VISTRA - DUCK CREEK |
| State of Sample Origin | IL | QC Deliverable | **STD Report** |

**All questions should be addressed to sending project manager.**

Requested Reportable Units _____ Report Wet or Dry Weight? _____ Cert Needed: IL

| WORK REQUESTED | | | | | | |
|---|---|---|---|---|---|---|
| **Method Description** | **Container Type** | **Quantity of** | **Preservative** | **Quantity of** | **Unit Price** | **Amount** |
| Radium 226 | | 8 | | 8 | $121.05 | $968.40 |
| Radium 228 | | 8 | | 8 | $121.05 | $968.40 |
| | | 1 | | 1 | | $0.00 |
| | | | | | **TOTAL** | $1,936.80 |

**Special Requirements:** Report as 226, 228 & combined 226/228. Include QC summary & edd

| Receiving Reqion Department | Acctg. Code | Totals from above | Revenue Allocation | |
|---|---|---|---|---|
| | | | Receiving Region (80%) | Client Services Dept. |
| radiological | 38 | $1,936.80 | $1,549.44 | $387.36 |
| | | | | |
| | | | | |
| * Custom Revenue Allocation | | TOTAL | $1,549.44 | $387.36 |

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region: [ ] Yes [X] No

CONFIRMATION OF WORK COMPLETED

Date Completed: _____ Receiving Project Manager: _____

Original sent to the receiving lab - Copy kept at the sending lab.

When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

# ANALYTICAL REPORT

June 21, 2023



## Pace IR - Peoria, IL

| | |
|---|---|
| Sample Delivery Group: | L1619139 |
| Samples Received: | 05/23/2023 |
| Project Number: | GEO3280 |
| Description: | Vistra-Duck Creek |
| Site: | 01 |
| Report To: | Gail Schindler |
| | 2231 W. Altorfer Drive |
| | Peoria, IL 61615 |

Entire Report Reviewed By:

Haley Torrence

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

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# SAMPLE SUMMARY

## OM01 L1619139-01 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/16/23 10:48 | 05/23/23 09:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2073396 | 1 | 06/08/23 08:06 | 06/14/23 17:51 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:46 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:46 | RGT | Mt. Juliet, TN |

## OM04S L1619139-02 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/16/23 12:15 | 05/23/23 09:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2073396 | 1 | 06/08/23 08:06 | 06/14/23 17:51 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:47 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:47 | RGT | Mt. Juliet, TN |

## OM24D L1619139-03 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/16/23 14:58 | 05/23/23 09:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2073396 | 1 | 06/08/23 08:06 | 06/14/23 17:51 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:47 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:47 | RGT | Mt. Juliet, TN |

## OM24D DUP L1619139-04 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/16/23 14:58 | 05/23/23 09:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2073396 | 1 | 06/08/23 08:06 | 06/14/23 17:51 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:47 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:47 | RGT | Mt. Juliet, TN |

## OR02 L1619139-05 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/16/23 12:14 | 05/23/23 09:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2073396 | 1 | 06/08/23 08:06 | 06/14/23 17:51 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:47 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:47 | RGT | Mt. Juliet, TN |

## OR03D L1619139-06 Non-Potable Water

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| | 05/16/23 13:36 | 05/23/23 09:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2073396 | 1 | 06/08/23 08:06 | 06/14/23 17:51 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:47 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:47 | RGT | Mt. Juliet, TN |

# SAMPLE SUMMARY

## OR04D L1619139-07 Non-Potable Water

| | Collected by | Collected date/time | Received date/time |
|---|---|---|---|
| | | 05/16/23 10:55 | 05/23/23 09:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2073396 | 1 | 06/08/23 08:06 | 06/14/23 17:51 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:47 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:47 | RGT | Mt. Juliet, TN |

## EQUIPMENT BLANK 10 L1619139-08 Non-Potable Water

| | Collected by | Collected date/time | Received date/time |
|---|---|---|---|
| | | 05/16/23 17:41 | 05/23/23 09:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2073396 | 1 | 06/08/23 08:06 | 06/14/23 17:51 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:47 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:47 | RGT | Mt. Juliet, TN |

## EQUIPMENT BLANK 11 L1619139-09 Non-Potable Water

| | Collected by | Collected date/time | Received date/time |
|---|---|---|---|
| | | 05/16/23 17:26 | 05/23/23 09:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Radiochemistry by Method 904/9320 | WG2073396 | 1 | 06/08/23 08:06 | 06/14/23 17:51 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:47 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:47 | RGT | Mt. Juliet, TN |

# CASE NARRATIVE

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

Haley Torrence
Project Manager

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

## Radiochemistry by Method 904/9320

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-228 | 0.799 | | 0.312 | 0.549 | 06/14/2023 17:51 | WG2073396 |
| *(T) Barium* | *87.3* | | | *30.0-143* | *06/14/2023 17:51* | WG2073396 |
| *(T) Yttrium* | *104* | | | *30.0-136* | *06/14/2023 17:51* | WG2073396 |

## Radiochemistry by Method Calculation

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 0.799 | | 0.346 | 0.630 | 06/16/2023 17:46 | WG2074499 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-226 | -0.00744 | U | 0.149 | 0.310 | 06/16/2023 17:46 | WG2074499 |
| *(T) Barium-133* | *90.0* | | | *30.0-143* | *06/16/2023 17:46* | WG2074499 |

## Radiochemistry by Method 904/9320

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-228 | 1.23 | | 0.345 | 0.596 | 06/14/2023 17:51 | WG2073396 |
| *(T) Barium* | *74.9* | | | *30.0-143* | *06/14/2023 17:51* | WG2073396 |
| *(T) Yttrium* | *97.8* | | | *30.0-136* | *06/14/2023 17:51* | WG2073396 |

## Radiochemistry by Method Calculation

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 1.28 | | 0.407 | 0.708 | 06/16/2023 17:47 | WG2074499 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-226 | 0.0507 | U | 0.216 | 0.382 | 06/16/2023 17:47 | WG2074499 |
| *(T) Barium-133* | *89.6* | | | *30.0-143* | *06/16/2023 17:47* | WG2074499 |

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.224 | U | 0.330 | 0.601 | 06/14/2023 17:51 | WG2073396 |
| *(T) Barium* | *72.0* | | | *30.0-143* | *06/14/2023 17:51* | WG2073396 |
| *(T) Yttrium* | *103* | | | *30.0-136* | *06/14/2023 17:51* | WG2073396 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.290 | U | 0.370 | 0.670 | 06/16/2023 17:47 | WG2074499 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.0651 | U | 0.167 | 0.296 | 06/16/2023 17:47 | WG2074499 |
| *(T) Barium-133* | *91.8* | | | *30.0-143* | *06/16/2023 17:47* | WG2074499 |

# OM24D DUP SAMPLE RESULTS - 04

Collected date/time: 05/16/23 14:58 L1619139

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | -0.0449 | U | 0.288 | 0.535 | 06/14/2023 17:51 | WG2073396 |
| *(T) Barium* | *73.6* | | | *30.0-143* | *06/14/2023 17:51* | WG2073396 |
| *(T) Yttrium* | *106* | | | *30.0-136* | *06/14/2023 17:51* | WG2073396 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.0414 | U | 0.320 | 0.601 | 06/16/2023 17:47 | WG2074499 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.0414 | U | 0.140 | 0.273 | 06/16/2023 17:47 | WG2074499 |
| *(T) Barium-133* | *91.3* | | | *30.0-143* | *06/16/2023 17:47* | WG2074499 |

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.715 | | 0.344 | 0.611 | 06/14/2023 17:51 | WG2073396 |
| *(T) Barium* | *86.9* | | | *30.0-143* | *06/14/2023 17:51* | WG2073396 |
| *(T) Yttrium* | *113* | | | *30.0-136* | *06/14/2023 17:51* | WG2073396 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 1.68 | | 0.544 | 0.703 | 06/16/2023 17:47 | WG2074499 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.964 | | 0.421 | 0.348 | 06/16/2023 17:47 | WG2074499 |
| *(T) Barium-133* | *86.7* | | | *30.0-143* | *06/16/2023 17:47* | WG2074499 |

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

## Radiochemistry by Method 904/9320

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-228 | 1.05 | | 0.376 | 0.658 | 06/14/2023 17:51 | WG2073396 |
| *(T) Barium* | *75.6* | | | *30.0-143* | *06/14/2023 17:51* | WG2073396 |
| *(T) Yttrium* | *92.4* | | | *30.0-136* | *06/14/2023 17:51* | WG2073396 |

## Radiochemistry by Method Calculation

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 1.21 | | 0.422 | 0.709 | 06/16/2023 17:47 | WG2074499 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-226 | 0.160 | J | 0.192 | 0.264 | 06/16/2023 17:47 | WG2074499 |
| *(T) Barium-133* | *92.3* | | | *30.0-143* | *06/16/2023 17:47* | WG2074499 |

## Radiochemistry by Method 904/9320

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-228 | 1.89 | | 0.313 | 0.508 | 06/14/2023 17:51 | WG2073396 |
| *(T) Barium* | *72.8* | | | *30.0-143* | *06/14/2023 17:51* | WG2073396 |
| *(T) Yttrium* | *106* | | | *30.0-136* | *06/14/2023 17:51* | WG2073396 |

## Radiochemistry by Method Calculation

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 2.39 | | 0.434 | 0.593 | 06/16/2023 17:47 | WG2074499 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|---|---|---|---|---|---|---|
| | pCi/l | | + / - | pCi/l | date / time | |
| RADIUM-226 | 0.500 | | 0.301 | 0.306 | 06/16/2023 17:47 | WG2074499 |
| *(T) Barium-133* | *92.6* | | | *30.0-143* | *06/16/2023 17:47* | WG2074499 |

# EQUIPMENT BLANK 10 SAMPLE RESULTS - 08

Collected date/time: 05/16/23 17:41 L1619139

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.329 | J | 0.303 | 0.546 | 06/14/2023 17:51 | WG2073396 |
| *(T) Barium* | *89.7* | | | *30.0-143* | *06/14/2023 17:51* | WG2073396 |
| *(T) Yttrium* | *96.2* | | | *30.0-136* | *06/14/2023 17:51* | WG2073396 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.329 | J | 0.308 | 0.577 | 06/16/2023 17:47 | WG2074499 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | -0.0242 | U | 0.0531 | 0.188 | 06/16/2023 17:47 | WG2074499 |
| *(T) Barium-133* | *95.5* | | | *30.0-143* | *06/16/2023 17:47* | WG2074499 |

# EQUIPMENT BLANK 11 SAMPLE RESULTS - 09

Collected date/time: 05/16/23 17:26 L1619139

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.206 | U | 0.361 | 0.661 | 06/14/2023 17:51 | WG2073396 |
| *(T) Barium* | *91.1* | | | *30.0-143* | *06/14/2023 17:51* | WG2073396 |
| *(T) Yttrium* | *103* | | | *30.0-136* | *06/14/2023 17:51* | WG2073396 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.213 | U | 0.372 | 0.695 | 06/16/2023 17:47 | WG2074499 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.00692 | U | 0.0910 | 0.215 | 06/16/2023 17:47 | WG2074499 |
| *(T) Barium-133* | *92.1* | | | *30.0-143* | *06/16/2023 17:47* | WG2074499 |

## Method Blank (MB)

(MB) R3938842-1 06/14/23 17:51

| Analyte | MB Result pCi/l | MB Qualifier | MB Uncertainty + / - pCi/l | MB MDA pCi/l |
|---|---|---|---|---|
| Radium-228 | 0.488 | | 0.154 | 0.268 |
| *(T) Barium* | *88.7* | | *88.7* | |
| *(T) Yttrium* | *104* | | *104* | |

## L1619139-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1619139-09 06/14/23 17:51 • (DUP) R3938842-5 06/14/23 17:51

| Analyte | Original Result pCi/l | Original Uncertainty + / - | Original MDA pCi/l | DUP Result pCi/l | DUP Uncertainty + / - | DUP MDA pCi/l | Dilution | DUP RPD % | DUP RER | DUP Qualifier | DUP RPD Limits % | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.206 | 0.361 | 0.661 | 0.734 | 0.414 | 0.661 | 1 | 112 | 0.960 | J | 20 | 3 |
| *(T) Barium* | *91.1* | | | *80.7* | *80.7* | | | | | | | |
| *(T) Yttrium* | *103* | | | *97.4* | *97.4* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3938842-2 06/14/23 17:51

| Analyte | Spike Amount pCi/l | LCS Result pCi/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Radium-228 | 5.00 | 4.68 | 93.5 | 80.0-120 | |
| *(T) Barium* | | | *99.0* | | |
| *(T) Yttrium* | | | *90.4* | | |

## L1619136-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1619136-03 06/14/23 17:51 • (MS) R3938842-3 06/14/23 17:51 • (MSD) R3938842-4 06/14/23 17:51

| Analyte | Spike Amount 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 | 0.939 | 15.8 | 18.5 | 89.1 | 105 | 1 | 70.0-130 | | | 15.3 | | 20 |
| *(T) Barium* | | *79.0* | | | *81.7* | *85.2* | | | | | | | |
| *(T) Yttrium* | | *105* | | | *108* | *95.2* | | | | | | | |

Radiochemistry by Method SM7500Ra B M

## Method Blank (MB)

(MB) R3938909-1 06/16/23 17:46

| Analyte | MB Result pCi/l | MB Qualifier | MB Uncertainty + / - | MB MDA pCi/l |
|---|---|---|---|---|
| Radium-226 | 0.00379 | U | 0.0352 | 0.0716 |
| *(T) Barium-133* | *90.6* | | *90.6* | |

## L1619139-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1619139-04 06/16/23 17:47 • (DUP) R3938909-5 06/16/23 17:46

| Analyte | Original Result pCi/l | Original Uncertainty + / - | Original MDA pCi/l | DUP Result pCi/l | DUP Uncertainty + / - | DUP MDA pCi/l | Dilution | DUP RPD % | DUP RER | DUP Qualifier | DUP RPD Limits % | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.0414 | 0.140 | 0.273 | 0.175 | 0.247 | 0.273 | 1 | 124 | 0.471 | J | 20 | 3 |
| *(T) Barium-133* | *91.3* | | | *84.9* | *84.9* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3938909-2 06/16/23 17:46

| Analyte | Spike Amount pCi/l | LCS Result pCi/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Radium-226 | 5.01 | 5.35 | 107 | 80.0-120 | |
| *(T) Barium-133* | | | *87.7* | | |

## L1614550-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1614550-02 06/16/23 17:46 • (MS) R3938909-3 06/16/23 17:46 • (MSD) R3938909-4 06/16/23 17:46

| Analyte | Spike Amount 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 | 0.475 | 21.6 | 22.2 | 105 | 109 | 1 | 75.0-125 | | | 3.11 | | 20 |
| *(T) Barium-133* | | *91.2* | | | *88.6* | *87.5* | | | | | | | |

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

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

## Abbreviations and Definitions

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

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

# ACCREDITATIONS & LOCATIONS

## 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 | LAO000356 |
| 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.

Internal Transfer Chain of Custody

Pace Analytical®
www.pacelabs.com

State of Origin: IL
Cert. Needed: [X] YES [ ] NO

**GE03280** **Workorder Name:** VISTRA - DUCK CREEK **Owner Received Date:** 5/16/2023 **Results Requ By:** 6/1/2023

| Report To: | Subcontract To: |
|---|---|
| Gail Schindler<br>Pace Analytical - IL/MO<br>2231 W. Altorfer Drive<br>Peoria, IL 61615<br>800-752-6651 | Pace Analytical - Mt Juliet<br>12065 Lebanon Rd<br>Mt Juliet TN 37122 |

| Item | Sample ID | Sample Type | Collect Date/Time | Lab ID | Matrix | Preserved Containers HNO3 | Requested Analysis Radium 226 | Radium 228 | LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|
| 1 | OM01 | GRAB | 5/16/2023 10:48 | GE03280-01 | GW | X | X | X | 01 |
| 2 | OM04S | GRAB | 5/16/2023 12:15 | GE03280-02 | GW | X | X | X | 02 |
| 3 | OM24D | GRAB | 5/16/2023 14:58 | GE03280-03 | GW | X | X | X | 03 |
| 4 | OM24D DUP | GRAB | 5/16/2023 14:58 | GE03280-04 | GW | X | X | X | 04 |
| 5 | OR02 | GRAB | 5/16/2023 12:14 | GE03280-05 | GW | X | X | X | 05 |
| 6 | OR03D | GRAB | 5/16/2023 13:36 | GE03280-06 | GW | X | X | X | 06 |
| 7 | OR04D | GRAB | 5/16/2023 10:55 | GE03280-07 | GW | X | X | X | 07 |
| 8 | EQUIPMENT BLANK 10 | GRAB | 5/16/2023 17:41 | GE03280-08 | DI | X | X | X | 08 |
| 9 | EQUIPMENT BLANK 11 | GRAB | 5/16/2023 17:26 | GE03280-09 | DI | | | | 09 |

L1619139

| Transfers | | Date/Time | Reveived By | Date/Time |
|---|---|---|---|---|
| 1 | 3/14/2023 14:31 | 5/20/23 0550 | | 5/23/23 0860 |
| 2 | | | | |
| 3 | | | | |

**Comments:** Needs 226, 228 and combined
Include QC summary and edd
10 day TAT

| Cooler Temperature on Receipt _____ °C | Custody Seal Y or N | Received on Ice Y or N | Sample Intact Y or N |
|---|---|---|---|

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

6319 5999 0575 - 20.2 to = 20.2 NSAT

0564 - 18.9 to = 18.9 NSAT

Lows 4 other

Pace Analytical
www.pacelabs.com

Ship to :
Pace Analytical Services, LLC
12065 Lebanon Rd
Mt Juliet TN 37122

(615)758-5858

INTER_LABORATORY WORK ORDER # GE03280
(To be complete by sending lab)

| | |
|---|---|
| Sending Project No: | GE03280 |
| Receiving Project No: | |
| Check Box for Consolidated Invoice: | |
| Date Prepared: | 5/17/2023 |
| REQUESTED COMPLETION DATE: | 5/28/2023 |

| | | | |
|---|---|---|---|
| Sending Region | IR72-IL/MO | Sending Project Mgr. | Gail Schindler |
| Receiving Region | MT JULIET | External Client | VISTRA - DUCK CREEK |
| State of Sample Origin | IL | QC Deliverable | **STD Report** |

**All questions should be addressed to sending project manager.**

Requested Reportable Units _____ Report Wet or Dry Weight? _____ Cert Needed: IL

| WORK REQUESTED | | | | | | |
|---|---|---|---|---|---|---|
| **Method Description** | **Container Type** | **Quantity of** | **Preservative** | **Quantity of** | **Unit Price** | **Amount** |
| Radium 226 | | 9 | | 9 | $121.05 | $1,089.45 |
| Radium 228 | | 9 | | 9 | $121.05 | $1,089.45 |
| | | 1 | | 1 | | $0.00 |
| | | | | | **TOTAL** | $2,178.90 |

**Special Requirements:** Report as 226, 228 & combined 226/228. Include QC summary & edd

| Receiving Reqion Department | Acctg. Code | Totals from above | Revenue Allocation | |
|---|---|---|---|---|
| | | | Receiving Region (80%) | Client Services Dept. |
| radiological | 38 | $2,178.90 | $1,743.12 | $435.78 |
| | | | | |
| | | | | |
| * Custom Revenue Allocation | | TOTAL | $1,743.12 | $435.78 |

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region: [ ] Yes [X] No

CONFIRMATION OF WORK COMPLETED

Date Completed: _____ Receiving Project Manager: _____

Original sent to the receiving lab - Copy kept at the sending lab.
When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

# SUBCONTRACT ORDER
## Transfer Chain of Custody

## Pace Analytical Services, LLC

## GE03280

**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:** GE03280-01
**Name:** OM01

**Sampled:** 05/16/23 10:48
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/31/23 16:00 | 11/12/23 10:48 | |

**Sample:** GE03280-02
**Name:** OM04S

**Sampled:** 05/16/23 12:15
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/31/23 16:00 | 11/12/23 12:15 | |

**Sample:** GE03280-03
**Name:** OM24D

**Sampled:** 05/16/23 14:58
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/31/23 16:00 | 11/12/23 14:58 | |

**Sample:** GE03280-04
**Name:** OM24D DUP

**Sampled:** 05/16/23 14:58
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/31/23 16:00 | 11/12/23 14:58 | |

**Sample:** GE03280-05
**Name:** OR02

**Sampled:** 05/16/23 12:14
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/31/23 16:00 | 11/12/23 12:14 | |

# SUBCONTRACT ORDER
## Transfer Chain of Custody

## Pace Analytical Services, LLC

## GE03280

**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: GE03280-06**
**Name:** OR03D

**Sampled:** 05/16/23 13:36
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/31/23 16:00 | 11/12/23 13:36 | |

**Sample: GE03280-07**
**Name:** OR04D

**Sampled:** 05/16/23 10:55
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/31/23 16:00 | 11/12/23 10:55 | |

**Sample: GE03280-08**
**Name:** EB-10

**Sampled:** 05/16/23 17:41
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/31/23 16:00 | 11/12/23 17:41 | |

**Sample: GE03280-09**
**Name:** EB-11

**Sampled:** 05/16/23 17:26
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 05/31/23 16:00 | 11/12/23 17:26 | |

# SUBCONTRACT ORDER
## Transfer Chain of Custody

**Pace Analytical Services, LLC**

**GE03280**



**Please email results to Gail Schindler at gail.schindler@pacelabs.com**

Date Shipped: 5/22/23 Total # of Containers: 9 Sample Origin (State): IL PO #: _____

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

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| [signature] | 5/22/23 0550 | | |
| | | | |

| | |
|---|---|
| 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 |

Pace Analytical®

# ANALYTICAL REPORT

June 23, 2023



## Pace IR - Peoria, IL

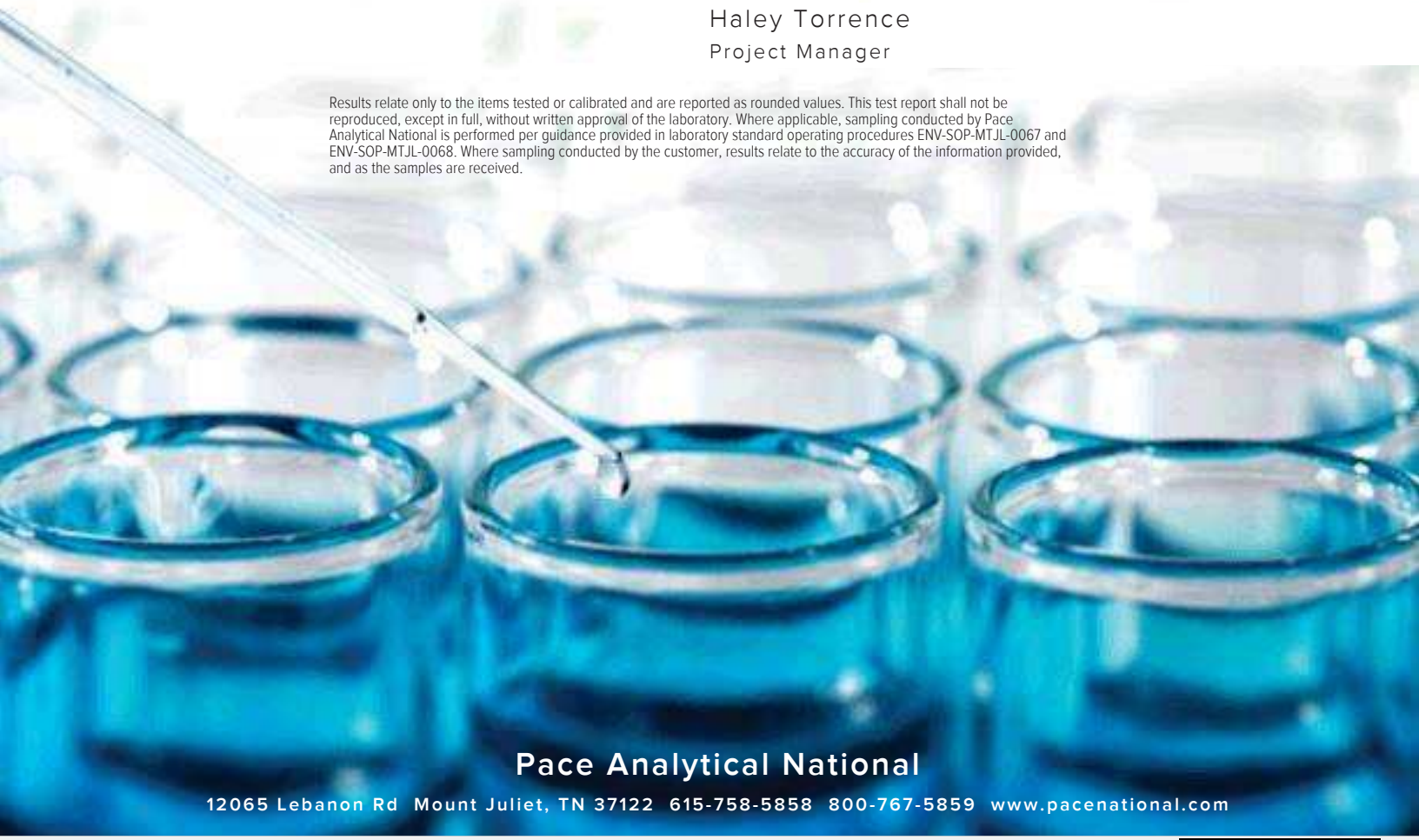
| | |
|---|---|
| Sample Delivery Group: | L1619136 |
| Samples Received: | 05/23/2023 |
| Project Number: | GEO3619 |
| Description: | Vistra-Duck Creek |
| Site: | 01 |
| Report To: | Gail Schindler |
| | 2231 W. Altorfer Drive |
| | Peoria, IL 61615 |

Entire Report Reviewed By:

Haley Torrence

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.



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# SAMPLE SUMMARY

## OM07 L1619136-01 Non-Potable Water

| | | | Collected by | Collected date/time | Received date/time | |
|---|---|---|---|---|---|---|
| | | | | 05/17/23 12:13 | 05/23/23 09:00 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2073396 | 1 | 06/08/23 08:06 | 06/14/23 17:51 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 17:51 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2072628 | 1 | 06/12/23 13:37 | 06/14/23 16:23 | RGT | Mt. Juliet, TN |

## OM22D L1619136-02 Non-Potable Water

| | | | Collected by | Collected date/time | Received date/time | |
|---|---|---|---|---|---|---|
| | | | | 05/17/23 16:55 | 05/23/23 09:00 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2073396 | 1 | 06/08/23 08:06 | 06/14/23 17:51 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:46 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:46 | RGT | Mt. Juliet, TN |

## OR06A L1619136-03 Non-Potable Water

| | | | Collected by | Collected date/time | Received date/time | |
|---|---|---|---|---|---|---|
| | | | | 05/17/23 13:45 | 05/23/23 09:00 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2073396 | 1 | 06/08/23 08:06 | 06/14/23 17:51 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:46 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:46 | RGT | Mt. Juliet, TN |

## OR13S L1619136-04 Non-Potable Water

| | | | Collected by | Collected date/time | Received date/time | |
|---|---|---|---|---|---|---|
| | | | | 05/17/23 15:20 | 05/23/23 09:00 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2073396 | 1 | 06/08/23 08:06 | 06/14/23 17:51 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:46 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:46 | RGT | Mt. Juliet, TN |

## EQUIPMENT BLANK 12 L1619136-05 Non-Potable Water

| | | | Collected by | Collected date/time | Received date/time | |
|---|---|---|---|---|---|---|
| | | | | 05/17/23 17:08 | 05/23/23 09:00 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2073396 | 1 | 06/08/23 08:06 | 06/14/23 17:51 | SNR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:46 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2074499 | 1 | 06/14/23 16:02 | 06/16/23 17:46 | RGT | Mt. Juliet, TN |

# CASE NARRATIVE

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

Haley Torrence

Haley Torrence
Project Manager

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.270 | U | 0.357 | 0.649 | 06/14/2023 17:51 | WG2073396 |
| *(T) Barium* | *64.3* | | | *30.0-143* | *06/14/2023 17:51* | WG2073396 |
| *(T) Yttrium* | *104* | | | *30.0-136* | *06/14/2023 17:51* | WG2073396 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.643 | J | 0.426 | 0.681 | 06/14/2023 17:51 | WG2072628 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.373 | | 0.233 | 0.207 | 06/14/2023 16:23 | WG2072628 |
| *(T) Barium-133* | *95.9* | | | *30.0-143* | *06/14/2023 16:23* | WG2072628 |

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.984 | | 0.265 | 0.455 | 06/14/2023 17:51 | WG2073396 |
| *(T) Barium* | *81.9* | | | *30.0-143* | *06/14/2023 17:51* | WG2073396 |
| *(T) Yttrium* | *102* | | | *30.0-136* | *06/14/2023 17:51* | WG2073396 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 1.54 | | 0.394 | 0.497 | 06/16/2023 17:46 | WG2074499 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.554 | | 0.292 | 0.200 | 06/16/2023 17:46 | WG2074499 |
| *(T) Barium-133* | *81.9* | | | *30.0-143* | *06/16/2023 17:46* | WG2074499 |

OR06A SAMPLE RESULTS - 03

Collected date/time: 05/17/23 13:45 L1619136

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.939 | | 0.476 | 0.846 | 06/14/2023 17:51 | WG2073396 |
| *(T) Barium* | *79.0* | | | *30.0-143* | *06/14/2023 17:51* | WG2073396 |
| *(T) Yttrium* | *105* | | | *30.0-136* | *06/14/2023 17:51* | WG2073396 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 1.34 | | 0.545 | 0.884 | 06/16/2023 17:46 | WG2074499 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.402 | | 0.265 | 0.258 | 06/16/2023 17:46 | WG2074499 |
| *(T) Barium-133* | *94.4* | | | *30.0-143* | *06/16/2023 17:46* | WG2074499 |

OR13S SAMPLE RESULTS - 04

Collected date/time: 05/17/23 15:20 L1619136

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | 0.282 | J | 0.315 | 0.572 | 06/14/2023 17:51 | WG2073396 |
| *(T) Barium* | *69.5* | | | *30.0-143* | *06/14/2023 17:51* | WG2073396 |
| *(T) Yttrium* | *110* | | | *30.0-136* | *06/14/2023 17:51* | WG2073396 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.320 | J | 0.332 | 0.606 | 06/16/2023 17:46 | WG2074499 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.0388 | U | 0.106 | 0.201 | 06/16/2023 17:46 | WG2074499 |
| *(T) Barium-133* | *88.4* | | | *30.0-143* | *06/16/2023 17:46* | WG2074499 |

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

# EQUIPMENT BLANK 12 SAMPLE RESULTS - 05

Collected date/time: 05/17/23 17:08 L1619136

## Radiochemistry by Method 904/9320

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-228 | -0.367 | U | 0.271 | 0.509 | 06/14/2023 17:51 | WG2073396 |
| *(T) Barium* | *86.6* | | | *30.0-143* | *06/14/2023 17:51* | WG2073396 |
| *(T) Yttrium* | *104* | | | *30.0-136* | *06/14/2023 17:51* | WG2073396 |

## Radiochemistry by Method Calculation

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| Combined Radium | 0.114 | U | 0.326 | 0.580 | 06/16/2023 17:46 | WG2074499 |

## Radiochemistry by Method SM7500Ra B M

| Analyte | Result pCi/l | Qualifier | Uncertainty + / - | MDA pCi/l | Analysis Date date / time | Batch |
|---|---|---|---|---|---|---|
| RADIUM-226 | 0.114 | J | 0.182 | 0.278 | 06/16/2023 17:46 | WG2074499 |
| *(T) Barium-133* | *90.5* | | | *30.0-143* | *06/16/2023 17:46* | WG2074499 |

## Method Blank (MB)

(MB) R3938842-1 06/14/23 17:51

| Analyte | MB Result pCi/l | MB Qualifier | MB Uncertainty + / - pCi/l | MB MDA pCi/l |
|---|---|---|---|---|
| Radium-228 | 0.488 | | 0.154 | 0.268 |
| *(T) Barium* | *88.7* | | *88.7* | |
| *(T) Yttrium* | *104* | | *104* | |

## L1619139-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1619139-09 06/14/23 17:51 • (DUP) R3938842-5 06/14/23 17:51

| Analyte | Original Result pCi/l | Original Uncertainty + / - | Original MDA pCi/l | DUP Result pCi/l | DUP Uncertainty + / - | DUP MDA pCi/l | Dilution | DUP RPD % | DUP RER | DUP Qualifier | DUP RPD Limits % | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.206 | 0.361 | 0.661 | 0.734 | 0.414 | 0.661 | 1 | 112 | 0.960 | J | 20 | 3 |
| *(T) Barium* | *91.1* | | | *80.7* | *80.7* | | | | | | | |
| *(T) Yttrium* | *103* | | | *97.4* | *97.4* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3938842-2 06/14/23 17:51

| Analyte | Spike Amount pCi/l | LCS Result pCi/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Radium-228 | 5.00 | 4.68 | 93.5 | 80.0-120 | |
| *(T) Barium* | | | *99.0* | | |
| *(T) Yttrium* | | | *90.4* | | |

## L1619136-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1619136-03 06/14/23 17:51 • (MS) R3938842-3 06/14/23 17:51 • (MSD) R3938842-4 06/14/23 17:51

| Analyte | Spike Amount 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 | 0.939 | 15.8 | 18.5 | 89.1 | 105 | 1 | 70.0-130 | | | 15.3 | | 20 |
| *(T) Barium* | | *79.0* | | | *81.7* | *85.2* | | | | | | | |
| *(T) Yttrium* | | *105* | | | *108* | *95.2* | | | | | | | |

Radiochemistry by Method SM7500Ra B,M

## Method Blank (MB)

(MB) R3937863-1 06/14/23 16:23

| Analyte | MB Result pCi/l | MB Qualifier | MB Uncertainty + / - pCi/l | MB MDA pCi/l |
|---|---|---|---|---|
| Radium-226 | 0.0613 | J | 0.0908 | 0.136 |
| *(T) Barium-133* | *47.6* | | *47.6* | |

## L1617727-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1617727-01 06/14/23 16:23 • (DUP) R3937863-5 06/14/23 16:23

| Analyte | Original Result pCi/l | Original Uncertainty + / - | Original MDA pCi/l | DUP Result pCi/l | DUP Uncertainty + / - | DUP MDA pCi/l | Dilution | DUP RPD % | DUP RER | DUP Qualifier | DUP RPD Limits % | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.742 | 0.400 | 0.359 | 0.496 | 0.326 | 0.359 | 1 | 39.8 | 0.477 | | 20 | 3 |
| *(T) Barium-133* | *76.2* | | | *83.9* | *83.9* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3937863-2 06/14/23 16:23

| Analyte | Spike Amount pCi/l | LCS Result pCi/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Radium-226 | 5.01 | 5.91 | 118 | 80.0-120 | |
| *(T) Barium-133* | | | *61.3* | | |

## L1617729-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617729-03 06/14/23 16:23 • (MS) R3937863-3 06/14/23 16:23 • (MSD) R3937863-4 06/14/23 16:23

| 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 | 0.0663 | 22.3 | 22.1 | 111 | 110 | 1 | 75.0-125 | | | 0.946 | | 20 |
| *(T) Barium-133* | | *90.1* | | | *79.0* | *69.9* | | | | | | | |

## Method Blank (MB)

(MB) R3938909-1 06/16/23 17:46

| Analyte | MB Result pCi/l | MB Qualifier | MB Uncertainty + / - | MB MDA pCi/l |
|---|---|---|---|---|
| Radium-226 | 0.00379 | U | 0.0352 | 0.0716 |
| *(T) Barium-133* | *90.6* | | *90.6* | |

## L1619139-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1619139-04 06/16/23 17:47 • (DUP) R3938909-5 06/16/23 17:46

| Analyte | Original Result pCi/l | Original Uncertainty + / - | Original MDA pCi/l | DUP Result pCi/l | DUP Uncertainty + / - | DUP MDA pCi/l | Dilution | DUP RPD % | DUP RER | DUP Qualifier | DUP RPD Limits % | DUP RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.0414 | 0.140 | 0.273 | 0.175 | 0.247 | 0.273 | 1 | 124 | 0.471 | J | 20 | 3 |
| *(T) Barium-133* | *91.3* | | | *84.9* | *84.9* | | | | | | | |

## Laboratory Control Sample (LCS)

(LCS) R3938909-2 06/16/23 17:46

| Analyte | Spike Amount pCi/l | LCS Result pCi/l | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Radium-226 | 5.01 | 5.35 | 107 | 80.0-120 | |
| *(T) Barium-133* | | | *87.7* | | |

## L1614550-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1614550-02 06/16/23 17:46 • (MS) R3938909-3 06/16/23 17:46 • (MSD) R3938909-4 06/16/23 17:46

| Analyte | Spike Amount 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 | 0.475 | 21.6 | 22.2 | 105 | 109 | 1 | 75.0-125 | | | 3.11 | | 20 |
| *(T) Barium-133* | | *91.2* | | | *88.6* | *87.5* | | | | | | | |

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

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

## Abbreviations and Definitions

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

## Qualifier Description

| 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 | LAO000356 |
| 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.

Internal Transfer Chain of Custody

Pace Analytical
www.pacelabs.com

State of Origin: IL
Cert. Needed: [X] YES [ ] NO

GE03619 **Workorder Name:** VISTRA - DUCK CREEK

Owner Received Date: 5/17/2023

Results Requ By: 6/1/2023

| Report To: | Subcontract To: |
|---|---|
| Gail Schindler<br>Pace Analytical - IL/MO<br>2231 W. Altorfer Drive<br>Peoria, IL 61615<br>800-752-6651 | Pace Analytical - Mt Juliet<br>12065 Lebanon Rd<br>Mt Juliet TN 37122 |

Requested Analysis

| Item | Sample ID | Sample Type | Collect Date/Time | Lab ID | Matrix | Preserved Containers: HNO3 | Radium 226 | Radium 228 | LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|
| 1 | OM07 | GRAB | 5/17/2023 12:13 | GE03619-01 | GW | X | X | X | 01 |
| 2 | OM22D | GRAB | 5/17/2023 16:55 | GE03619-02 | GW | X | X | X | 02 |
| 3 | OR06A | GRAB | 5/17/2023 13:45 | GE03619-03 | GW | X | X | X | 03 |
| 4 | OR13S | GRAB | 5/17/2023 15:20 | GE03619-04 | GW | X | X | X | 04 |
| 5 | EQUIPMENT BLANK 12 | GRAB | 5/17/2023 17:08 | GE03619-05 | DI | X | X | X | 05 |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| | | | | | | | | | |

L161936

| Transfers | | Date/Time | Reveived By | Date/Time | Comments |
|---|---|---|---|---|---|
| 1 | 5/14/2023 14:31 | 5/22/23 0550 | | | Needs 226, 228 and combined |
| 2 | | | | | Include QC summary and edd |
| 3 | | | | 5/23/23 0801 | 10 day TAT |

| Cooler Temperature on Receipt _____ °C | Custody Seal Y or N | Received on Ice Y or N | Sample Intact Y or N |
|---|---|---|---|

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

FMT-ALL-C-002rev

Sample Receipt Checklist

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

6319 5999 0575 - 20.2 to = 20.2 NSAT

0524 - 18.9 to = 18.9 NSAT

Cont

5-other

Pace Analytical
www.pacelabs.com

Ship to :
Pace Analytical Services, LLC
12065 Lebanon Rd
Mt Juliet TN 37122

(615)758-5858

INTER_LABORATORY WORK ORDER # GE03619

(To be complete by sending lab)

| | |
|---|---|
| Sending Project No: | GE03619 |
| Receiving Project No: | ### |
| Check Box for Consolidated Invoice: | |
| Date Prepared: | 5/19/2023 |
| REQUESTED COMPLETION DATE: | 6/1/2023 |

| | | | |
|---|---|---|---|
| Sending Region | IR72-IL/MO | Sending Project Mgr. | Gail Schindler |
| Receiving Region | MT JULIET | External Client | VISTRA - DUCK CREEK |
| State of Sample Origin | IL | QC Deliverable | **STD Report** |

**All questions should be addressed to sending project manager.**

Requested Reportable Units _____ Report Wet or Dry Weight? _____ Cert Needed: IL

| WORK REQUESTED | | | | | | |
|---|---|---|---|---|---|---|
| Method Description | Container Type | Quantity of | Preservative | Quantity of | Unit Price | Amount |
| Radium 226 | | 5 | | 5 | $121.05 | $605.25 |
| Radium 228 | | 5 | | 5 | $121.05 | $605.25 |
| | | 1 | | 1 | | $0.00 |
| | | | | | TOTAL | $1,210.50 |

**Special Requirements:** Report as 226, 228 & combined 226/228. Include QC summary & edd

| Receiving Region Department | Acctg. Code | Totals from above | Revenue Allocation | |
|---|---|---|---|---|
| | | | Receiving Region (80%) | Client Services Dept. |
| radiological | 38 | $1,210.50 | $968.40 | $242.10 |
| | | | | |
| | | | | |
| * Custom Revenue Allocation | | TOTAL | $968.40 | $242.10 |

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region: [ ] Yes [X] No

CONFIRMATION OF WORK COMPLETED

Date Completed: _____ Receiving Project Manager: _____

Original sent to the receiving lab - Copy kept at the sending lab.

When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

# SUBCONTRACT ORDER
## Transfer Chain of Custody

## Pace Analytical Services, LLC

## GE03619



**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: GE03619-01**
**Name:** OM07

**Sampled:** 05/17/23 12:13
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 06/01/23 16:00 | 11/13/23 12:13 | |

**Sample: GE03619-02**
**Name:** OM22D

**Sampled:** 05/17/23 16:55
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 06/01/23 16:00 | 11/13/23 16:55 | |

**Sample: GE03619-03**
**Name:** OR06A

**Sampled:** 05/17/23 13:45
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 06/01/23 16:00 | 11/13/23 13:45 | |

**Sample: GE03619-04**
**Name:** OR13S

**Sampled:** 05/17/23 15:20
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 06/01/23 16:00 | 11/13/23 15:20 | |

**Sample: GE03619-05**
**Name:** EB 12

**Sampled:** 05/17/23 17:08
**Matrix:** Ground Water
**Preservative:** HNO3, pH <2

| Analysis | Due | Expires | Comments |
|---|---|---|---|
| 01-Radium 226/228 combined | 06/01/23 16:00 | 11/13/23 17:08 | |

# SUBCONTRACT ORDER
## Transfer Chain of Custody

**Pace Analytical Services, LLC**

**GE03619**



**Please email results to Gail Schindler at gail.schindler@pacelabs.com**

Date Shipped: 5/22/23 Total # of Containers: 5 Sample Origin (State): IL PO #: _____

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

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| [signature] | 5/22/23 0550 | | |
| | | | |

| | |
|---|---|
| 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 |

# 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 |
| Address: | 13498 E. 900th St |
| 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: | Jason Stuckey |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

GE02234 gej

**Section D** Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Requested Analysis Filtered (Y/N) Y/N | Analysis Test | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_BA01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_BA02 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_BA02!L | | | 5/10/23 | 1415 | | 11 | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_BA03 +Dup | | | " | 1300 | | 22 | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_BA03!L | | | " | 1415 | | 11 | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_BA04 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_BA05# | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_BA06 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G02!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G02#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G02&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G03!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G04!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G06!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_G06#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_G07!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 1720 | 5/10/23 | Vance Wagner | 5-10-23 | 1720 | 3.3 | Y | N | Y |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Joe Reed
SIGNATURE of SAMPLER: Joseph R Reed
DATE Signed (MM/DD/YY): 5/10/23

CHAIN-OF-CUSTODY / Analytical Request Document

| | | | |
|---|---|---|---|
| Company: Vistra Corp | Report To: Brian Voelker | Attention: Jason Stuckey | REGULATORY AGENCY |
| Address: 13498 E. 900th St | Copy To: Jason Stuckey | Company Name: Vistra Corp | NPDES GROUND WATER DRINKING WATER |
| | | Address: see Section A | UST RCRA OTHER |
| Email To: Brian.Voelker@VistraCorp.com | Purchase Order No.: | Quote Reference: | |
| Phone: (217) 753-8911 Fax: | Project Name: | Project Manager: | Site Location STATE: IL GE02234 gcf |
| Requested Due Date/TAT: 10 day | Project Number: 2285 | Profile #: | |

Section D Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test ↓ Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Requested Analysis Filtered (Y/N) | | | | | | | | | | | | | | | | | | | | | | |
| 1 | DC_OM04#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_OM05#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_OM07 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_OM08 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_OM09 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_OM10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_OM12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_OM15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_OM16 | | | 5/10/23 | 1350 | | 10 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_OM17 | | | 5/10/23 | 1214 | | 10 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_OM21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_OM22#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_OM22&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_OM23#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_OM23&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_OM24&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | | | | | | | | | |
| | | | | | 5-10-23 | 1720 | 3.3 | Y | N | Y |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Dale Reed
SIGNATURE of SAMPLER: Joseph R Reed
DATE Signed (MM/DD/YY): 5/10/23

## 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: |
|---|---|---|
| Company: Vistra Corp | Report To: Brian Voelker | Attention: Jason Stuckey |

| | | | |
|---|---|---|---|
| Address: 13498 E. 900th St | Copy To: Jason Stuckey | Company Name: Vistra Corp | REGULATORY AGENCY |
| | | Address: see Section A | NPDES GROUND WATER DRINKING WATER |
| Email To: Brian.Voelker@VistraCorp.com | Purchase Order No.: | Quote Reference: | UST RCRA OTHER |
| Phone: (217) 753-8911 Fax: | Project Name: | Project Manager: | Site Location STATE: IL |
| Requested Due Date/TAT: 10 day | Project Number: 2285 | Profile #: | GE02234 gef |

Section D Required Client Information

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

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

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_OM25#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_OM25&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_OR02 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_OR03#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_OR03&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_OR04&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_OR05&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_OR06!A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_OR11 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_OR13#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_OR13&D | | | 5/10/23 | 1520 | | 10 | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_OR14#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_OR14&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_OR18 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_OR19 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_OR20 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reel | 5/10/23 | 1720 | Vance Wagner | 5-10-23 | 1720 | 3.3 | Y | W | Y |
| | | | | | | | Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Joseph R Reel
SIGNATURE of SAMPLER: Joseph R Reel
DATE Signed (MM/DD/YY): 5/10/23

## 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: |
|---|---|---|
| Company: Vistra Corp | Report To: Brian Voelker | Attention: Jason Stuckey |
| Address: 13498 E. 900th St | Copy To: Jason Stuckey | Company Name: Vistra Corp |

REGULATORY AGENCY

| Phone: (217) 753-8911 | Fax: | Project Name: | Project Manager: | Site Location STATE: | IL | |
|---|---|---|---|---|---|---|
| Requested Due Date/TAT: 10 day | | Project Number: 2285 | Profile #: | | | |

Requested Analysis Filtered (Y/N)

GE02234 gej

| ITEM # | Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE | Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Y/N | Analysis Test ↓ DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_T44!L | | | | 5/10/23 | 1435 | | 2 | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_T45!L | | | | 5/10/23 | 1510 | | 2 | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_T46!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_X301_leachate | | | | 5/10/23 | 1543 | | 11 | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | EB-2 | | | | 5/10/23 | 1545 | | 10 | | | | | | | | | | | | | | | | | | | | | |
| 7 | EB 3 | | | | 5/10/23 | 1545 | | 4 | | | | | | | | | | | | | | | | | | | | | |
| 8 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph Reed | 5/10/23 | 1720 | Vann Wagner | 5-10-23 | 1720 | 3.3 | Y | N | Y |

| SAMPLER NAME AND SIGNATURE | | |
|---|---|---|
| PRINT Name of SAMPLER: | Joe Reed | |
| SIGNATURE of SAMPLER: | Joseph R Reed | DATE Signed (MM/DD/YY): 5/10/23 |

| Phone: (217) 753-8911 | Fax: | Project Name: | Project Manager: | Site Location STATE: | IL | |
|---|---|---|---|---|---|---|
| Requested Due Date/TAT: 10 day | | Project Number: 2285 | Profile #: | | | |

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 |

GEO2539-01 gej

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_T44!L | | | 5/10/23 | 1435 | | 2 | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_T45!L | | | 5/10/23 | 1510 | | 2 | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_T46!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_X301_leachate | | | 5/10/23 | 1543 | | 11 | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | EB 2 | | | 5/10/23 | 1545 | | 10 | | | | | | | | | | | | | | | | | | | | | | |
| 7 | EB 3 | | | 5/10/23 | 1545 | | 4 | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 5/10/23 | 1720 | Vanessa Wagner | 5-10-23 | 1720 | 3.3 | Y | N | Y |
| | | | | | | | Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joe Reed

SIGNATURE of SAMPLER: Joseph R Reed

DATE Signed (MM/DD/YY): 5/10/23

PACE ANALYTICAL SERVICES
WWW.PACELABS.COM

| REGULATORY PROGRAM (CIRCLE): | NPDES |
|---|---|
| MORBCA | RCRA |
| CCDD | TACO: RES OR IND/COMM |

# CHAIN OF CUSTODY RECORD

SAMPLE COLLECTED IN THE STATE OF IL

*ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)*

| 1 CLIENT | PROJECT NUMBER | PROJECT LOCATION | PURCHASE ORDER # |
|---|---|---|---|
| City of Rockford | | | |
| **ADDRESS** | **PHONE NUMBER** | **E-MAIL** | **DATE SHIPPED** |
| 1111 Cedar Street | 779-348-7151 | Josh.Baylor@rockfordil.gov | 5/17/2023 |
| **CITY STATE ZIP** | **SAMPLER (PLEASE PRINT)** | | **MATRIX TYPES:** |
| Rockford, IL 61102 | David Setiawan | | WW- WASTEWATER<br>DW- DRINKING WATER<br>GW- GROUND WATER<br>WWSL- SLUDGE<br>NAS- NON AQUEOUS SOLID<br>LCHT-LEACHATE<br>OIL-OIL<br>SO-SOIL<br>SOL-SOLID |
| **CONTACT PERSON** | **SAMPLER'S SIGNATURE** | | |
| Josh Baylor | | | |

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN # GE03611
LOGGED BY:
CLIENT:
PROJECT:
PROJ. MGR.:
CUSTODY SEAL #:

| 2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT) | DATE COLLECTED | TIME COLLECTED | SAMPLE TYPE GRAB | SAMPLE TYPE COMP | MATRIX TYPE | BOTTLE COUNT | PRES CODE CLIENT PROVIDED | + Nitrate | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| Travlur Motel - IL3046532 | 5/16/23 | 11:56 AM | X | | DW | 1 | | X | XC:IDPH |
| Forest Hills Country Club - IL3140038 | 5/16/23 | 7:00 AM | X | | DW | 1 | | X | XC:IDPH |
| Forest Hills Diamonds - IL3142349 | 5/16/23 | 11:00 AM | X | | DW | 1 | | X | XC:IDPH |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

CHEMICAL PRESERVATION CODES: 1 – HCL | 2 – H2SO4 | 3 – HNO3 | 4 – NAOH | 5 – NA2S2O3 | 6 – UNPRESERVED | 7 – OTHER

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) (RUSH TAT IS SUBJECT TO PACE LABS APPROVAL AND SURCHARGE): (NORMAL) RUSH
DATE RESULTS NEEDED
RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL PHONE
EMAIL IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:

6 *I understand that by initialing this box I give the lab permission to proceed with analysis, even though it may not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may NOT be acceptable to report to all regulatory authorities.*
PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS)

| 7 RELINQUISHED BY: (SIGNATURE) | DATE / TIME | RECEIVED BY: (SIGNATURE) | DATE / TIME |
|---|---|---|---|
| | 5/17/23 10:00 AM | | |
| RELINQUISHED BY: (SIGNATURE) | DATE / TIME | RECEIVED BY: (SIGNATURE) | DATE / TIME |
| | | | |
| RELINQUISHED BY: (SIGNATURE) | DATE / TIME | RECEIVED BY: (SIGNATURE) | DATE / TIME |
| | | | 5/17/23 1515 |

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 5.8 °C
TEMPERATURE GUN ID
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED Y OR N
DATE AND TIME TAKEN FROM SAMPLE BOTTLE

~~GEO2632~~
Vmw 5-12-23
GEO26516

Page: 1 of 9

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

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Requested Analysis Filtered (Y/N)

| ITEM # | Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_BA01 | WT | G | 5/11/23 | 1333 | | 11 | X | X | X | | | | | | | | | | | | | | | | | | | |
| 2 | DC_BA02 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_BA02!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_BA03 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_BA03!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_BA04 | WT | G | 5/11/23 | 1146 | | 11 | X | X | X | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_BA05# | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_BA06 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G02!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G02#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G02&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G03!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G04!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G06!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_G06#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_G07!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | | 5/11/23 | 1720 | | | | 5 | | / | |
| | | | | Grace Jackson | 5/11/23 | 17:20 | 5 | / | | / |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Harold Pemberton
SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 05/11/23

CHAIN-OF-CUSTODY / Analytical Request Document

GE02656 ~~GE02637~~ Vmw 5-12-23

Page: 3 of 9

**Section A** Required Client Information:

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| | |
| 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: | Jason Stuckey |
| | |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

**Section D** Required Client Information

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

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

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_G54#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_G55!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_G55#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_G56!L FD | WT | G | 5/11/23 | 1109 | | 8 | X | X | X | | | | | | | | | | | | | | | | | | | |
| 5 | DC_G56#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_G57!L | WT | G | 5/11/23 | 1158 | | 4 | X | X | X | | | | | | | | | | | | | | | | | | | |
| 7 | DC_G57#S | WT | G | 5/11/23 | 1522 | | 4 | X | X | X | | | | | | | | | | | | | | | | | | | |
| 8 | DC_G58!L | WT | G | 5/11/23 | 1258 | | 4 | X | X | X | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G58#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G59!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G59#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G60!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G60#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G61#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_G62!L | WT | G | 5/11/23 | 1358 | | 4 | X | X | X | | | | | | | | | | | | | | | | | | | |
| 16 | DC_G63!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Requested Analysis Filtered (Y/N)

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | | 5/11/23 | 1720 | | | | 5 | | 2 | |
| | | | | | | | 5.6 | Y | | Y |
| | | | | | | | Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: Brian Pemberton

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 5/11/23

## CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Section B Section C

Page: 4 of 9

GE02656 ~~GE02657~~ VMW 5-12-23

**Required Client Information:**

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| Email To: | Brian.Voelker@VistraCorp.com |
| Phone: (217) 753-8911 | Fax: |
| Requested Due Date/TAT: | 10 day |

**Required Project Information:**

| | |
|---|---|
| Report To: | Brian Voelker |
| Copy To: | Jason Stuckey |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Invoice Information:**

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

**Section D** Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_G63#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_G64!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_G64#S | WT | G | 5/11/23 | 1511 | | 12 | X | X | X | | | | | | | | | | | | | | | | | | | |
| 4 | DC_G65!L | WT | G | 5/11/23 | 1251 | | 4 | X | X | X | | | | | | | | | | | | | | | | | | | |
| 5 | DC_G65#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_G66!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_G66#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_G67!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G67#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G70!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G71!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G71#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G72!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G73!L | WT | G | 5/11/23 | 1205 | | 10 | X | X | X | | | | | | | | | | | | | | | | | | | |
| 15 | DC_L103 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_OM01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Requested Analysis Filtered (Y/N)

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | | 5/11/23 | 1720 | | | | | | | |
| | | | | grace Jack | 5/11/23 | 17:20 | 5.1 | 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: | Barbara Bingleton | | | | | |
| SIGNATURE of SAMPLER: | | DATE Signed (MM/DD/YY): 05/11/23 | | | | |

## 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:

GE02656
Vmw 5-12-23

| Phone: (217) 753-8911 | Fax: | Project Name: | Project Manager: | Site Location STATE: | IL | |
|---|---|---|---|---|---|---|
| Requested Due Date/TAT: 10 day | | Project Number: 2285 | Profile #: | | | |

Section D Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | Requested Analysis Filtered (Y/N) | | | | | | | | | | | | | |
| 1 | DC_T44!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_T45!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_T46!L | WT | G | 5/11/23 | 1525 | | 2 | X | | X | | | | | | | | | | | | | | | | | | | |
| 4 | DC_X301_leachate | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | EB-4 | | | 5/11/23 | 1600 | | 12 | X | X | X | | | | | | | | | | | | | | | | | | | |
| 6 | EB-5 | | | 5/11/23 | 1605 | | 10 | X | X | X | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS |
|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | | 5/11/23 | 1720 | | | | |

| 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: | Hasan Kmbarton | | | | |
| SIGNATURE of SAMPLER: | DATE Signed (MM/DD/YY): 05/11/23 | | | | |

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 2, 2023
DUCK CREEK POWER PLANT, GYPSUM MANAGEMENT FACILITY POND
DC-845-203

# 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 |
| Address: | 13498 E. 900th St |
| 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: | Jason Stuckey |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

GE02775 glf

**Section D** Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | Requested Analysis Filtered (Y/N) | | | | | | | | | | | | | | |
| 1 | DC_BA01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_BA02 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_BA02!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_BA03 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_BA03!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_BA04 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_BA05# | | | 5/12/23 | 1050 | | 11 | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_BA06 | | | 5/12/23 | 1219 | | 12 | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G02!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G02#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G02&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G03!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G04!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | OJS 5-31-23 DC_G06!L + FD Dup | | | 5/12/23 | 1205 | | 8 | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_G06#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_G07!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME |
|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 5/12/23 | 1431 | | | |
| | | | | grace | 5/12/23 | 14:31 |

**SAMPLE CONDITIONS**

| Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|
| 8 | 8 | N | 30 |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Joe Reed
SIGNATURE of SAMPLER: Joseph R Reed
DATE Signed (MM/DD/YY): 5/12/23

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:

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| 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: | Jason Stuckey |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL GEO2775 gef

**Section D** Required Client Information

**Valid Matrix Codes**

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

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

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_G08!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_G09!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_G12!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_G12#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_G14!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_G15!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_G16!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_G50!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G50#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G51!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G51#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G52!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G52#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G53!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_G53#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_G54!L | | | 5/12/23 | 1220 | | 12 | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 5/12/23 | 1431 | grace Jordan | 5/12/23 | 14:31 | 2.2 | Y | 2 | Y |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Joe Reed
SIGNATURE of SAMPLER: Joseph R Reed
DATE Signed (MM/DD/YY): 5/12/23

**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:

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| 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: | Jason Stuckey |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |



**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL GE02775

**Section D** Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | GJS 5-3-23 DC_G54#S + FD Dup | | | 5/12/23 | 1304 | | 24 | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_G55!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_G55#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_G56!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_G56#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_G57!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_G57#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_G58!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G58#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G59!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G59#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G60!L | | | 5/12/23 | 1048 | | 18 | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G60#S | | | 5/12/23 | 1100 | | 12 | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G61#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_G62!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_G63!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME |
|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 5/12/23 | 1431 | grace | 5/12/23 | 14:31 |

**SAMPLE CONDITIONS**

| Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|
| 6 | | N | |
| 4 | Y | | Y |

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joe Reed

SIGNATURE of SAMPLER: Joseph R Reed

DATE Signed (MM/DD/YY): 5/12/23

## CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Section B Section C

| Phone: (217) 753-8911 | Fax: | Project Name: | Project Manager: | Site Location STATE: | IL | |
|---|---|---|---|---|---|---|
| Requested Due Date/TAT: 10 day | | Project Number: 2285 | Profile #: | | | |

GE02775 gej

| ITEM # | Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS | | | | | | | | | | | | | | | Requested Analysis Filtered (Y/N) | | | | | | | | | | | | | |
| 1 | DC_T44!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_T45!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_T46!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_X301_leachate | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | EB-6 | | | 5/12/23 | 1036 | | 5 | | | | | | | | | | | | | | | | | | | | | | |
| 6 | EB-7 | | | 5/12/23 | 1245 | | 12 | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 5/12/23 | | | | | 2.8 | | 2 | |
| | | | | [signature] | 5/12/23 | 14:31 | 2 | Y | | Y |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: J R Reed
SIGNATURE of SAMPLER: Joseph R Reed
DATE Signed (MM/DD/YY): 5/12/23

GEO3000
VMW 5-16-23

# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 9

**Section A** Required Client Information:

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| 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: | Jason Stuckey |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

**Section D** Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test ↓ Y/N ↓ | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_BA01 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_BA02 | | | 5/15/23 | 1123 | | 11 | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_BA02!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_BA03 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_BA03!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_BA04 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_BA05# | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_BA06 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G02!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G02#S | | | 5/15/23 | 1518 | | 11 | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G02&D | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G03!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G04!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G06!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_G06#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_G07!L | | | | | | | | | | | | | | | | | | | | | | | | | | |

Requested Analysis Filtered (Y/N)

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS |
|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 5/15/23 | 1800 | | | | |
| | | | | Vanessa Wagner | 5-16-23 | 650 | 0.3 / Y / N / Y |

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joe Reed

SIGNATURE of SAMPLER: Joseph R Reed

DATE Signed (MM/DD/YY): 5/15/23

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

CHAIN-OF-CUSTODY / Analytical Request Document

GEO3000
VMW 5-16-23

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

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

**Section D** Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test ↓ Y/N ↓ | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | Requested Analysis Filtered (Y/N) | | | | | | | | | | | | |
| 1 | DC_G08!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_G09!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_G12!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_G12#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_G14!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_G15!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_G16!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_G50!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G50#S | | | 5/15/23 | 1256 | | 12 | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G51!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G51#S | | | 5/15/23 | 1126 | | 12 | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G52!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G52#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G53!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_G53#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_G54!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 5/15/23 | 1800 | | | | | | | |
| | | | | Vanessa Wagner | 5-16-23 | 650 | 0.3 | Y | N | Y |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Joe Reed
SIGNATURE of SAMPLER: Joseph R Reed
DATE Signed (MM/DD/YY): 5/15/23

**CHAIN-OF-CUSTODY / Analytical Request Document**

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

GE03000
VMJ 5-16-23

Page: 3 of 9

**Section A** DC-845-203
Required Client Information:

| | |
|---|---|
| Company: Vistra Corp | |
| Address: 13498 E. 900th St | |
| 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: Jason Stuckey | |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: 2285 | |

**Section C**
Invoice Information:

| | |
|---|---|
| Attention: Jason Stuckey | |
| Company Name: Vistra Corp | |
| Address: see Section A | |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

**Section D**
Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_G54#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_G55!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_G55#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_G56!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_G56#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_G57!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_G57#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_G58!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G58#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G59!L | | | 5/15/23 | 1552 | | 18 | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G59#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G60!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G60#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G61#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | ~~DC_G62!L~~ FB #8 | | | 5/15/23 | 1750 | | 10 | | | | | | | | | | | | | | | | | | | | | |
| 16 | ~~DC_G63#L~~ FB #9 | | | 5/15/23 | 1750 | | 12 | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joe Reed | 5/15/23 | 1800 | | | | | | | |
| | | | | | 5-16-23 | 650 | 0.3 | Y | N | Y |

| SAMPLER NAME AND SIGNATURE | | | |
|---|---|---|---|
| PRINT Name of SAMPLER: | Joe Reed | | |
| SIGNATURE of SAMPLER: | | DATE Signed (MM/DD/YY): | 5/15/23 |

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

**CHAIN-OF-CUSTODY / Analytical Request Document**

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

Section A Section B Section C

GEO3000
VMW 5-16-23

DC 845.202

**Required Client Information:**

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| | |
| Email To: | Brian.Voelker@VistraCorp.com |
| Phone: (217) 753-8911 | Fax: |
| Requested Due Date/TAT: | 10 day |

**Required Project Information:**

| | |
|---|---|
| Report To: | Brian Voelker |
| Copy To: | Jason Stuckey |
| | |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Invoice Information:**

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

**Section D** Required Client Information

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

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

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Requested Analysis Filtered (Y/N) Y/N | Analysis Test | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_G63#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_G64!L | | | 5/15/23 | 1500 | | 12 | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_G64#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_G65!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_G65#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_G66!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_G66#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_G67!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G67#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G70!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G71!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G71#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G72!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G73!L | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_L103 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_OM01 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 5/15/23 | 1500 | Vanessa Wayman | 5-16-23 | 650 | 0.3 | Y | N | Y |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Joe Reed
SIGNATURE of SAMPLER: Joseph R Reed
DATE Signed (MM/DD/YY): 5/15/23

## 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:

GE03000
VMW 5-16-23

| | | | |
|---|---|---|---|
| Company: DC-845-202 Vistra Corp | Report To: Brian Voelker | Attention: Jason Stuckey | REGULATORY AGENCY |
| Address: 13498 E. 900th St | Copy To: Jason Stuckey | Company Name: Vistra Corp | NPDES GROUND WATER DRINKING WATER |
| | | Address: see Section A | UST RCRA OTHER |
| Email To: Brian.Voelker@VistraCorp.com | Purchase Order No.: | Quote Reference: | |
| Phone: (217) 753-8911 Fax: | Project Name: | Project Manager: | Site Location STATE: IL |
| Requested Due Date/TAT: 10 day | Project Number: 2285 | Profile #: | |

Section D Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_OM04#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_OM05#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_OM07 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_OM08 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_OM09 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_OM10 | | | 5/13/23 | 1314 | | 10 | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_OM12 | | | 5/13/23 | 1405 | | 11 | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_OM15 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_OM16 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_OM17 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_OM21 | | | 5/15/23 | 1324 | | 10 | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_OM22#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_OM22&D | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_OM23#S | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_OM23&D | | | 5/15/23 | 1600 | | 10 | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_OM24&D | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joseph R Reed | 5/15/23 | 1900 | | | | | | | |
| | | | | | 5-16-23 | 650 | 0.3 | Y | N | Y |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Joe Reed
SIGNATURE of SAMPLER: Joseph R Reed
DATE Signed (MM/DD/YY): 5/15/23

## 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: Company: Vistra Corp
Section B Required Project Information: Report To: Brian Voelker
Section C Invoice Information: Attention: Jason Stuckey

GEO3000
VMW 5-16-23

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

Section D Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Y/N ⇩Analysis Test⇩ | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_OM25#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_OM25&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_OR02 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_OR03#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_OR03&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_OR04&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_OR05&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_OR06!A | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_OR11 | | | 5/13/23 | 1233 | | 11 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_OR13#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_OR13&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_OR14#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_OR14&D | | | 5/15/23 | 1135 | | 11 | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_OR18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_OR19 | | | 5/15/23 | 1528 | | 11 | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_OR20 | | | 5/15/23 | 1110 | | 11 | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | Joe Joseph R Reed | 5/15/23 | 1800 | Vam Wagner | 5-16-23 | 650 | 0.3 | Y | N | Y |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Joe Reed
SIGNATURE of SAMPLER: Joseph R Reed
DATE Signed (MM/DD/YY): 5/15/23

## CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 7 of 9

| Section A Required Client Information: | Section B Required Project Information: | Section C Invoice Information: |
|---|---|---|
| Company: Vistra Corp | Report To: Brian Voelker | Attention: Jason Stuckey |
| Address: 13498 E. 900th St | Copy To: Jason Stuckey | Company Name: Vistra Corp |

REGULATORY AGENCY

**Required Client Information:**

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| | |
| Email To: | Brian.Voelker@VistraCorp.com |
| Phone: (217) 753-8911 | Fax: |
| Requested Due Date/TAT: | 10 day |

**Required Project Information:**

| | |
|---|---|
| Report To: | Brian Voelker |
| Copy To: | Jason Stuckey |
| | |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Invoice Information:**

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES | GROUND WATER | DRINKING WATER
UST | RCRA | OTHER

Site Location STATE: IL

6E03280 gef

**Section D** Required Client Information

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

**Valid Matrix Codes**

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Requested Analysis Filtered (Y/N) | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | DC_G63#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_G64!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_G64#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_G65!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_G65#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_G66!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_G66#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_G67!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_G67#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_G70!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_G71!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_G71#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_G72!L RS | WT | G | 5/16/23 | 1525 | | 1 | X | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_G73!L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_L103 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_OM01 | WT | G | 5/16/23 | 1048 | | 12 | X | X | X | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
| DC-23Q2-Rev 0 | | 5/16/23 | 1747 | | | | | | | |
| | | | | grace Jantz | 5/16/23 | 17:47 | 5.5 | Y | N | Y |

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: Trevor Richardson

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 05/16/23

## 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:

# 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 |
| Address: | 13498 E. 900th St |
| 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: | Jason Stuckey |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL GE63280 gef

**Section D** Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Requested Analysis Filtered (Y/N) Y/N | Analysis Test | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_OM04#S | WT | G | 5/16/23 | 1215 | | 10 | X | X | X | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_OM05#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_OM07 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_OM08 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_OM09 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_OM10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_OM12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_OM15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_OM16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_OM17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_OM21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_OM22#S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_OM22&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_OM23#S | MS 5-31-23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_OM23&D | DUP | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_OM24&D | LFB | WT | G | 5/16/23 | 1458 | | 10 | X | X | X | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | | 5/16/23 | 1747 | | | | | | | |
| | | | | | 5/16/23 | 17:45 | 5.5 | Y | N | Y |

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Aaron Pemberton

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 05/16/23

# 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:

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| 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: | Jason Stuckey |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL GE03282

**Section D** Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_OM25#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_OM25&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_OR02 | WT | G | 5/16/23 | 1214 | | 10 | X | X | X | | | | | | | | | | | | | | | | | | |
| 4 | DC_OR03#S | | | | | | ~~10~~ | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_OR03&D | WT | G | 5/16/23 | 1336 | | 10 | X | X | X | | | | | | | | | | | | | | | | | | |
| 6 | DC_OR04&D | WT | G | 5/16/23 | 1055 | | 10 | X | X | X | | | | | | | | | | | | | | | | | | |
| 7 | DC_OR05&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_OR06!A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_OR11 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_OR13#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_OR13&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_OR14#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_OR14&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_OR18 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_OR19 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_OR20 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | | 05/16/23 | 1747 | | | | | | | |
| | | | | grace Justus | 5/16/23 | 17:47 | 5.5 | Y | N | Y |

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Aaron Stemberger

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 05/16/23

# 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:

| | |
|---|---|
| Company: | Vistra Corp |
| Address: | 13498 E. 900th St |
| | |
| 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: | Jason Stuckey |
| | |
| Purchase Order No.: | |
| Project Name: | |
| Project Number: | 2285 |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | Jason Stuckey |
| Company Name: | Vistra Corp |
| Address: | see Section A |
| Quote Reference: | |
| Project Manager: | |
| Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL GE03280

**Section D** Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_T44IL | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_T45IL | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_T46IL | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_X301_leachate RS | WT | G | 5/16/23 | 1539 | | 1 | X | | | | | | | | | | | | | | | | | | | |
| 5 | Equipment Blank 7 RS | WT | G | 5/16/23 | 1545 | | 1 | X | | | | | | | | | | | | | | | | | | | |
| 6 | Equipment Blank 10 | WT | G | 5/16/23 | 1741 | | 10 | X | X | X | | | | | | | | | | | | | | | | | |
| 7 | Equipment Blank 11 | WT | G | 5/16/23 | 1726 | | 12 | X | X | X | | | | | | | | | | | | | | | | | |
| 8 | BA03 + EQUIP RS 5/17/23 | WT | G | 5/16/23 | 1423 | | 2 | X | | | | | | | | | | | | | | | | | | | |
| 9 | BA03L RS | WT | G | 5/16/23 | 1446 | | 1 | X | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Requested Analysis Filtered (Y/N)

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS |
|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | | 5/16/23 | 1747 | | | | |
| | | | | | 5/16/23 | 17:47 | 5.5 / Y / N / Y |

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Aaron Pemberton

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 05/16/23

| Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|
| 5.5 | Y | N | Y |

| | | | |
|---|---|---|---|
| Company: Vistra Corp | Report To: Brian Voelker | Attention: Jason Stuckey | REGULATORY AGENCY |
| Address: 13498 E. 900th St | Copy To: Jason Stuckey | Company Name: Vistra Corp | NPDES GROUND WATER DRINKING WATER |
| | | Address: see Section A | UST RCRA OTHER |
| Email To: Brian.Voelker@VistraCorp.com | Purchase Order No.: | Quote Reference: | Site Location STATE: IL — 6E03C19 |
| Phone: (217) 753-8911 Fax: | Project Name: | Project Manager: | |
| Requested Due Date/TAT: 10 day | Project Number: 2285 | Profile #: | |

Section D Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_OM04#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_OM05#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_OM07 | WT | G | 5/17/23 | 1213 | | 10 | X | XX | | | | | | | | | | | | | | | | | | | |
| 4 | DC_OM08 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_OM09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_OM10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_OM12 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_OM15 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC_OM16 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_OM17 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | DC_OM21 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_OM22#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_OM22&D | WT | G | 5/17/23 | 1655 | | 10 | X | XX | | | | | | | | | | | | | | | | | | | |
| 14 | DC_OM23#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_OM23&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_OM24&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | | 5/17/23 | 1814 | | 5-17-23 | 1814 | 14.4 | Y | N | Y |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Aaron Pemberton
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 05/17/23

## 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: Company: Vistra Corp

Section B Required Project Information: Report To: Brian Voelker

Section C Invoice Information: Attention: Jason Stuckey

| | | | |
|---|---|---|---|
| Address: 13498 E. 900th St | Copy To: Jason Stuckey | Company Name: Vistra Corp | REGULATORY AGENCY |
| | | Address: see Section A | NPDES GROUND WATER DRINKING WATER |
| Email To: Brian.Voelker@VistraCorp.com | Purchase Order No.: | Quote Reference: | UST RCRA OTHER |
| Phone: (217) 753-8911 Fax: | Project Name: | Project Manager: | Site Location STATE: IL GE03619 |
| Requested Due Date/TAT: 10 day | Project Number: 2285 | Profile #: | |

Section D Required Client Information

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

Valid Matrix Codes

| MATRIX | CODE |
|---|---|
| DRINKING WATER | DW |
| WATER | WT |
| WASTE WATER | WW |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OIL | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_OM25#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_OM25&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_OR02 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_OR03#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | DC_OR03&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DC_OR04&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | DC_OR05&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | DC_OR06!A | WT | G | 5/17/23 | 1345 | | 10 | X | X | X | | | | | | | | | | | | | | | | | | |
| 9 | DC_OR11 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | DC_OR13#S | WT | G | 5/17/23 | 1520 | | 10 | X | X | X | | | | | | | | | | | | | | | | | | |
| 11 | DC_OR13&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | DC_OR14#S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | DC_OR14&D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | DC_OR18 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | DC_OR19 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | DC_OR20 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | | 5/17/23 | 1814 | | 5-17-23 | 1814 | 14.4 | Y | N | Y |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Aaron Pemberton
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 05/17/23

## 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: |
|---|---|---|
| Company: Vistra Corp | Report To: Brian Voelker | Attention: Jason Stuckey |
| Address: 13498 E. 900th St | Copy To: Jason Stuckey | Company Name: Vistra Corp |

REGULATORY AGENCY

| Phone: (217) 753-8911 | Fax: | Project Name: | Project Manager: | Site Location STATE: | IL | |
|---|---|---|---|---|---|---|
| Requested Due Date/TAT: 10 day | | Project Number: 2285 | Profile #: | | | |

GE036619

DC-845-203

Requested Analysis Filtered (Y/N)

| ITEM # | Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED DATE | COLLECTED TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test ↓ Y/N | DC_257_203 | DC_257_204 | DC_257_205 | DC_811_204 | DC_845_201-202 | DC_845_203 | DC_845_205 | DC_CLOSURE_201-202 | DC_SUP_000 | DC_WPCP_203-206 | Residual Chlorine (Y/N) | Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DC_T44!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | DC_T45!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | DC_T46!L | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DC_X301_leachate | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | G605 Resample | WT | G | 5/17/23 | 1027 | | 1 | X | | | | | | | | | | | | | | | | | | | |
| 6 | Equipment Blank 12 | WT | G | 5/17/23 | 1708 | | 10 | X | X | X | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DC-23Q2-Rev 0 | | 5/17/23 | 1814 | | | | | | | |
| | | | | | 5-17-23 | 1814 | 14.4 | Y | N | Y |
| | | | | | | | Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Aeron Pemberton

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 05/17/23

# ATTACHMENT C
# COMPARISON OF STATISTICAL RESULTS TO BACKGROUND
# QUARTER 2 2023

**ATTACHMENT C.**
**COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | HSU | Event | Parameter | Units | Date Range | Sample Count | Percent ND | Statistical Calculation | Statistical Result | Background |
|---|---|---|---|---|---|---|---|---|---|---|
| G54L | UA/PMP | E001 | Antimony, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.003 | 0.003 |
| G54L | UA/PMP | E001 | Arsenic, total | mg/L | 04/14/21 - 05/12/23 | 9 | 0 | CB around linear reg | -0.0111 | 0.0092 |
| G54L | UA/PMP | E001 | Barium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 0 | CI around mean | 0.148 | 0.28 |
| G54L | UA/PMP | E001 | Beryllium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.001 |
| G54L | UA/PMP | E001 | Boron, total | mg/L | 04/14/21 - 05/12/23 | 10 | 0 | CI around geomean | 0.0162 | 0.21 |
| G54L | UA/PMP | E001 | Cadmium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.001 |
| G54L | UA/PMP | E001 | Chloride, total | mg/L | 04/14/21 - 05/12/23 | 10 | 0 | CI around mean | 15 | 17 |
| G54L | UA/PMP | E001 | Chromium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 89 | CI around median | 0.004 | 0.0059 |
| G54L | UA/PMP | E001 | Cobalt, total | mg/L | 04/14/21 - 05/12/23 | 9 | 33 | CI around geomean | 0.00189 | 0.002 |
| G54L | UA/PMP | E001 | Fluoride, total | mg/L | 04/14/21 - 05/12/23 | 10 | 90 | CI around median | 0.25 | 0.498 |
| G54L | UA/PMP | E001 | Lead, total | mg/L | 04/14/21 - 05/12/23 | 9 | 82 | Most recent sample | 0.001 | 0.015 |
| G54L | UA/PMP | E001 | Lithium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.02 | 0.02 |
| G54L | UA/PMP | E001 | Mercury, total | mg/L | 04/14/21 - 05/12/23 | 9 | 89 | CI around median | 0.0002 | 0.00098 |
| G54L | UA/PMP | E001 | Molybdenum, total | mg/L | 04/14/21 - 05/12/23 | 9 | 44 | CI around geomean | 0.000861 | 0.0023 |
| G54L | UA/PMP | E001 | pH (field) | SU | 04/14/21 - 05/12/23 | 16 | 0 | CI around median | 6.5/6.6 | 6.6/7.4 |
| G54L | UA/PMP | E001 | Radium 226 + Radium 228, total | pCi/L | 04/14/21 - 05/12/23 | 9 | 0 | CI around mean | 0.288 | 2 |
| G54L | UA/PMP | E001 | Selenium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.0012 |
| G54L | UA/PMP | E001 | Sulfate, total | mg/L | 04/14/21 - 05/12/23 | 10 | 0 | CI around mean | 61.3 | 55 |
| G54L | UA/PMP | E001 | Thallium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.001 |
| G54L | UA/PMP | E001 | Total Dissolved Solids | mg/L | 04/14/21 - 05/12/23 | 16 | 0 | CI around mean | 689 | 483 |
| G54S | UA | E001 | Antimony, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.003 | 0.003 |
| G54S | UA | E001 | Arsenic, total | mg/L | 12/04/15 - 05/12/23 | 9 | 22 | CI around geomean | 0.000842 | 0.0092 |
| G54S | UA | E001 | Barium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 0 | CI around mean | 0.213 | 0.28 |
| G54S | UA | E001 | Beryllium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.001 |
| G54S | UA | E001 | Boron, total | mg/L | 12/04/15 - 05/12/23 | 23 | 0 | CI around mean | 0.0317 | 0.21 |
| G54S | UA | E001 | Cadmium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.001 |
| G54S | UA | E001 | Chloride, total | mg/L | 12/04/15 - 05/12/23 | 21 | 8 | CI around mean | 2.02 | 17 |

**ATTACHMENT C.**
**COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | HSU | Event | Parameter | Units | Date Range | Sample Count | Percent ND | Statistical Calculation | Statistical Result | Background |
|---|---|---|---|---|---|---|---|---|---|---|
| G54S | UA | E001 | Chromium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.004 | 0.0059 |
| G54S | UA | E001 | Cobalt, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.002 | 0.002 |
| G54S | UA | E001 | Fluoride, total | mg/L | 12/04/15 - 05/12/23 | 22 | 78 | CI around median | 0.25 | 0.498 |
| G54S | UA | E001 | Lead, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.015 |
| G54S | UA | E001 | Lithium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 67 | CI around median | 0.01 | 0.02 |
| G54S | UA | E001 | Mercury, total | mg/L | 12/04/15 - 05/12/23 | 9 | 90 | CI around median | 0.0002 | 0.00098 |
| G54S | UA | E001 | Molybdenum, total | mg/L | 12/04/15 - 05/12/23 | 9 | 0 | CI around mean | 0.00145 | 0.0023 |
| G54S | UA | E001 | pH (field) | SU | 12/04/15 - 05/12/23 | 30 | 0 | CB around linear reg | 6.5/7.0 | 6.6/7.4 |
| G54S | UA | E001 | Radium 226 + Radium 228, total | pCi/L | 12/04/15 - 05/12/23 | 9 | 0 | CI around mean | 0.576 | 2 |
| G54S | UA | E001 | Selenium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.0012 |
| G54S | UA | E001 | Sulfate, total | mg/L | 12/04/15 - 05/12/23 | 21 | 0 | CB around T-S line | 31 | 55 |
| G54S | UA | E001 | Thallium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.001 |
| G54S | UA | E001 | Total Dissolved Solids | mg/L | 12/04/15 - 05/12/23 | 29 | 0 | CI around mean | 515 | 483 |
| G57S | UA | E001 | Antimony, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | CI around median | 0.003 | 0.003 |
| G57S | UA | E001 | Arsenic, total | mg/L | 12/04/15 - 05/11/23 | 9 | 89 | Most recent sample | 0.001 | 0.0092 |
| G57S | UA | E001 | Barium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 0 | CI around median | 0.13 | 0.28 |
| G57S | UA | E001 | Beryllium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | CI around median | 0.001 | 0.001 |
| G57S | UA | E001 | Boron, total | mg/L | 12/04/15 - 05/11/23 | 22 | 42 | CI around median | 0.01 | 0.21 |
| G57S | UA | E001 | Cadmium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 89 | CI around median | 0.001 | 0.001 |
| G57S | UA | E001 | Chloride, total | mg/L | 12/04/15 - 05/11/23 | 21 | 2 | CI around median | 18 | 17 |
| G57S | UA | E001 | Chromium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | Most recent sample | 0.004 | 0.0059 |
| G57S | UA | E001 | Cobalt, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | Most recent sample | 0.002 | 0.002 |
| G57S | UA | E001 | Fluoride, total | mg/L | 12/04/15 - 05/11/23 | 23 | 33 | CI around geomean | 0.264 | 0.498 |
| G57S | UA | E001 | Lead, total | mg/L | 12/04/15 - 05/11/23 | 9 | 72 | CI around median | 0.001 | 0.015 |
| G57S | UA | E001 | Lithium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 100 | All ND - Last | 0.02 | 0.02 |
| G57S | UA | E001 | Mercury, total | mg/L | 12/04/15 - 05/11/23 | 9 | 100 | All ND - Last | 0.0002 | 0.00098 |
| G57S | UA | E001 | Molybdenum, total | mg/L | 12/04/15 - 05/11/23 | 9 | 89 | CI around median | 0.001 | 0.0023 |

**ATTACHMENT C.**
**COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | HSU | Event | Parameter | Units | Date Range | Sample Count | Percent ND | Statistical Calculation | Statistical Result | Background |
|---|---|---|---|---|---|---|---|---|---|---|
| G57S | UA | E001 | pH (field) | SU | 12/04/15 - 05/11/23 | 29 | 0 | CB around linear reg | 6.6/6.9 | 6.6/7.4 |
| G57S | UA | E001 | Radium 226 + Radium 228, total | pCi/L | 12/04/15 - 05/11/23 | 9 | 0 | CI around mean | 0.0864 | 2 |
| G57S | UA | E001 | Selenium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | Most recent sample | 0.001 | 0.0012 |
| G57S | UA | E001 | Sulfate, total | mg/L | 12/04/15 - 05/11/23 | 21 | 0 | CB around linear reg | 46.7 | 55 |
| G57S | UA | E001 | Thallium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | CI around median | 0.001 | 0.001 |
| G57S | UA | E001 | Total Dissolved Solids | mg/L | 12/04/15 - 05/11/23 | 29 | 0 | CB around linear reg | 737 | 483 |
| G60L | UA/PMP | E001 | Antimony, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.003 | 0.003 |
| G60L | UA/PMP | E001 | Arsenic, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.0092 |
| G60L | UA/PMP | E001 | Barium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 0 | CI around mean | 0.0146 | 0.28 |
| G60L | UA/PMP | E001 | Beryllium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.001 |
| G60L | UA/PMP | E001 | Boron, total | mg/L | 04/14/21 - 05/12/23 | 10 | 0 | CI around geomean | 0.0237 | 0.21 |
| G60L | UA/PMP | E001 | Cadmium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.001 |
| G60L | UA/PMP | E001 | Chloride, total | mg/L | 04/14/21 - 05/12/23 | 10 | 0 | CB around linear reg | 8.09 | 17 |
| G60L | UA/PMP | E001 | Chromium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.004 | 0.0059 |
| G60L | UA/PMP | E001 | Cobalt, total | mg/L | 04/14/21 - 05/12/23 | 9 | 22 | CI around mean | 0.00196 | 0.002 |
| G60L | UA/PMP | E001 | Fluoride, total | mg/L | 04/14/21 - 05/12/23 | 10 | 100 | All ND - Last | 0.25 | 0.498 |
| G60L | UA/PMP | E001 | Lead, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.015 |
| G60L | UA/PMP | E001 | Lithium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.02 | 0.02 |
| G60L | UA/PMP | E001 | Mercury, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.0002 | 0.00098 |
| G60L | UA/PMP | E001 | Molybdenum, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.0023 |
| G60L | UA/PMP | E001 | pH (field) | SU | 04/14/21 - 05/12/23 | 16 | 0 | CI around mean | 6.1/6.2 | 6.6/7.4 |
| G60L | UA/PMP | E001 | Radium 226 + Radium 228, total | pCi/L | 04/14/21 - 05/12/23 | 9 | 0 | CI around mean | -0.0429 | 2 |
| G60L | UA/PMP | E001 | Selenium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.0012 |
| G60L | UA/PMP | E001 | Sulfate, total | mg/L | 04/14/21 - 05/12/23 | 10 | 10 | CI around mean | 149 | 55 |
| G60L | UA/PMP | E001 | Thallium, total | mg/L | 04/14/21 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.001 |
| G60L | UA/PMP | E001 | Total Dissolved Solids | mg/L | 04/14/21 - 05/12/23 | 16 | 0 | CI around mean | 545 | 483 |
| G60S | UA | E001 | Antimony, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.003 | 0.003 |

**ATTACHMENT C.**
**COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | HSU | Event | Parameter | Units | Date Range | Sample Count | Percent ND | Statistical Calculation | Statistical Result | Background |
|---|---|---|---|---|---|---|---|---|---|---|
| G60S | UA | E001 | Arsenic, total | mg/L | 12/04/15 - 05/12/23 | 9 | 18 | CI around geomean | 0.00111 | 0.0092 |
| G60S | UA | E001 | Barium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 0 | CI around mean | 0.129 | 0.28 |
| G60S | UA | E001 | Beryllium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.001 |
| G60S | UA | E001 | Boron, total | mg/L | 12/04/15 - 05/12/23 | 24 | 9 | CI around geomean | 0.0153 | 0.21 |
| G60S | UA | E001 | Cadmium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.001 |
| G60S | UA | E001 | Chloride, total | mg/L | 12/04/15 - 05/12/23 | 22 | 2 | CI around geomean | 8.14 | 17 |
| G60S | UA | E001 | Chromium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 67 | CI around median | 0.004 | 0.0059 |
| G60S | UA | E001 | Cobalt, total | mg/L | 12/04/15 - 05/12/23 | 9 | 89 | CI around median | 0.002 | 0.002 |
| G60S | UA | E001 | Fluoride, total | mg/L | 12/04/15 - 05/12/23 | 23 | 44 | CI around median | 0.25 | 0.498 |
| G60S | UA | E001 | Lead, total | mg/L | 12/04/15 - 05/12/23 | 9 | 35 | CI around median | 0.001 | 0.015 |
| G60S | UA | E001 | Lithium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 89 | CI around median | 0.01 | 0.02 |
| G60S | UA | E001 | Mercury, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.0002 | 0.00098 |
| G60S | UA | E001 | Molybdenum, total | mg/L | 12/04/15 - 05/12/23 | 9 | 67 | CI around median | 0.001 | 0.0023 |
| G60S | UA | E001 | pH (field) | SU | 12/04/15 - 05/12/23 | 30 | 0 | CI around mean | 6.7/6.8 | 6.6/7.4 |
| G60S | UA | E001 | Radium 226 + Radium 228, total | pCi/L | 12/04/15 - 05/12/23 | 9 | 0 | CI around mean | 0.701 | 2 |
| G60S | UA | E001 | Selenium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 89 | CI around median | 0.001 | 0.0012 |
| G60S | UA | E001 | Sulfate, total | mg/L | 12/04/15 - 05/12/23 | 23 | 0 | CI around median | 64 | 55 |
| G60S | UA | E001 | Thallium, total | mg/L | 12/04/15 - 05/12/23 | 9 | 100 | All ND - Last | 0.001 | 0.001 |
| G60S | UA | E001 | Total Dissolved Solids | mg/L | 12/04/15 - 05/12/23 | 30 | 0 | CI around mean | 557 | 483 |
| G64L | UA/PMP | E001 | Antimony, total | mg/L | 05/15/23 - 05/15/23 | 1 | 100 | Most recent sample | 0.003 | 0.003 |
| G64L | UA/PMP | E001 | Arsenic, total | mg/L | 05/15/23 - 05/15/23 | 1 | 29 | Most recent sample | 0.0016 | 0.0092 |
| G64L | UA/PMP | E001 | Barium, total | mg/L | 05/15/23 - 05/15/23 | 1 | 0 | Most recent sample | 0.1 | 0.28 |
| G64L | UA/PMP | E001 | Beryllium, total | mg/L | 05/15/23 - 05/15/23 | 1 | 100 | Most recent sample | 0.001 | 0.001 |
| G64L | UA/PMP | E001 | Boron, total | mg/L | 01/11/23 - 05/15/23 | 2 | 12 | Most recent sample | 0.031 | 0.21 |
| G64L | UA/PMP | E001 | Cadmium, total | mg/L | 05/15/23 - 05/15/23 | 1 | 100 | Most recent sample | 0.001 | 0.001 |
| G64L | UA/PMP | E001 | Chloride, total | mg/L | 01/11/23 - 05/15/23 | 2 | 12 | Most recent sample | 2.8 | 17 |
| G64L | UA/PMP | E001 | Chromium, total | mg/L | 05/15/23 - 05/15/23 | 1 | 0 | Most recent sample | 0.0074 | 0.0059 |

**ATTACHMENT C.**
**COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | HSU | Event | Parameter | Units | Date Range | Sample Count | Percent ND | Statistical Calculation | Statistical Result | Background |
|---|---|---|---|---|---|---|---|---|---|---|
| G64L | UA/PMP | E001 | Cobalt, total | mg/L | 05/15/23 - 05/15/23 | 1 | 100 | Most recent sample | 0.002 | 0.002 |
| G64L | UA/PMP | E001 | Fluoride, total | mg/L | 01/11/23 - 05/15/23 | 2 | 50 | Most recent sample | 0.25 | 0.498 |
| G64L | UA/PMP | E001 | Lead, total | mg/L | 05/15/23 - 05/15/23 | 1 | 29 | Most recent sample | 0.002 | 0.015 |
| G64L | UA/PMP | E001 | Lithium, total | mg/L | 05/15/23 - 05/15/23 | 1 | 100 | Most recent sample | 0.02 | 0.02 |
| G64L | UA/PMP | E001 | Mercury, total | mg/L | 05/15/23 - 05/15/23 | 1 | 100 | Most recent sample | 0.0002 | 0.00098 |
| G64L | UA/PMP | E001 | Molybdenum, total | mg/L | 05/15/23 - 05/15/23 | 1 | 0 | Most recent sample | 0.0016 | 0.0023 |
| G64L | UA/PMP | E001 | pH (field) | SU | 01/11/23 - 05/15/23 | 2 | 0 | Most recent sample | 7.0/7.0 | 6.6/7.4 |
| G64L | UA/PMP | E001 | Radium 226 + Radium 228, total | pCi/L | 05/15/23 - 05/15/23 | 1 | 0 | Most recent sample | 0.938 | 2 |
| G64L | UA/PMP | E001 | Selenium, total | mg/L | 05/15/23 - 05/15/23 | 1 | 100 | Most recent sample | 0.001 | 0.0012 |
| G64L | UA/PMP | E001 | Sulfate, total | mg/L | 01/11/23 - 05/15/23 | 2 | 0 | Most recent sample | 69 | 55 |
| G64L | UA/PMP | E001 | Thallium, total | mg/L | 05/15/23 - 05/15/23 | 1 | 100 | Most recent sample | 0.001 | 0.001 |
| G64L | UA/PMP | E001 | Total Dissolved Solids | mg/L | 01/11/23 - 05/15/23 | 2 | 0 | Most recent sample | 600 | 483 |
| G64S | UA | E001 | Antimony, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | CI around median | 0.003 | 0.003 |
| G64S | UA | E001 | Arsenic, total | mg/L | 12/04/15 - 05/11/23 | 9 | 0 | CI around mean | 0.00193 | 0.0092 |
| G64S | UA | E001 | Barium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 0 | CI around mean | 0.163 | 0.28 |
| G64S | UA | E001 | Beryllium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 100 | All ND - Last | 0.001 | 0.001 |
| G64S | UA | E001 | Boron, total | mg/L | 12/04/15 - 05/11/23 | 22 | 3 | CI around geomean | 0.0147 | 0.21 |
| G64S | UA | E001 | Cadmium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 100 | All ND - Last | 0.001 | 0.001 |
| G64S | UA | E001 | Chloride, total | mg/L | 12/04/15 - 05/11/23 | 21 | 2 | CI around median | 3.5 | 17 |
| G64S | UA | E001 | Chromium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | CI around median | 0.004 | 0.0059 |
| G64S | UA | E001 | Cobalt, total | mg/L | 12/04/15 - 05/11/23 | 9 | 100 | All ND - Last | 0.002 | 0.002 |
| G64S | UA | E001 | Fluoride, total | mg/L | 12/04/15 - 05/11/23 | 23 | 12 | CI around median | 0.287 | 0.498 |
| G64S | UA | E001 | Lead, total | mg/L | 12/04/15 - 05/11/23 | 9 | 33 | CI around mean | 0.000747 | 0.015 |
| G64S | UA | E001 | Lithium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 100 | All ND - Last | 0.02 | 0.02 |
| G64S | UA | E001 | Mercury, total | mg/L | 12/04/15 - 05/11/23 | 9 | 100 | All ND - Last | 0.0002 | 0.00098 |
| G64S | UA | E001 | Molybdenum, total | mg/L | 12/04/15 - 05/11/23 | 9 | 11 | CI around mean | 0.00119 | 0.0023 |
| G64S | UA | E001 | pH (field) | SU | 12/04/15 - 05/11/23 | 30 | 0 | CI around median | 6.8/7.0 | 6.6/7.4 |

**ATTACHMENT C.**
**COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 2, 2023**
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

| Well ID | HSU | Event | Parameter | Units | Date Range | Sample Count | Percent ND | Statistical Calculation | Statistical Result | Background |
|---|---|---|---|---|---|---|---|---|---|---|
| G64S | UA | E001 | Radium 226 + Radium 228, total | pCi/L | 12/04/15 - 05/11/23 | 9 | 0 | CI around mean | 0.515 | 2 |
| G64S | UA | E001 | Selenium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 90 | CI around median | 0.001 | 0.0012 |
| G64S | UA | E001 | Sulfate, total | mg/L | 12/04/15 - 05/11/23 | 21 | 0 | CI around mean | 23.8 | 55 |
| G64S | UA | E001 | Thallium, total | mg/L | 12/04/15 - 05/11/23 | 9 | 100 | All ND - Last | 0.001 | 0.001 |
| G64S | UA | E001 | Total Dissolved Solids | mg/L | 12/04/15 - 05/11/23 | 28 | 0 | CI around mean | 424 | 483 |

**Notes:**
Lower Confidence Limit (LCL) or Upper Confidence Limit (UCL) exceeded the statistical background value
HSU = hydrostratigraphic unit:

UA = Uppermost Aquifer

UA/PMP = Uppermost Aquifer/Potential Migration Pathway

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 Statistical Analysis Plan using constituent concentrations observed at 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