2021 Annual Groundwater Monitoring and Corrective Action Report

for Compliance with the Coal Combustion Residuals (CCR) Rule

Gibbons Creek Steam Electric Station

Gibbons Creek Environmental Redevelopment Group, LLC

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Table of Abbreviations and Acronyms

Abbreviation	Definition
AMSL	Above Mean Sea Level
AP	Ash Ponds
ASD	Alternate Source Demonstration
CCR	Coal Combustion Residuals
CFR	Code of Federal Regulations
cm/s	centimeters per second
EPA	Environmental Protection Agency
EPRI	Electric Power Research Institute
ERCOT	Electric Reliability Council of Texas
GCERG	Gibbons Creek Environmental Redevelopment Group, LLC.
GCSES	Gibbons Creek Steam Electric Station
GWPS	Groundwater Protection Standard
LCL	Lower Confidence Limit
LLDPE	Low-Linear Density Polyethylene
MDL	Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
RCL	Recompacted Clay Liner
RL	Reporting Limit
RPD	Relative Percent Difference
SFL	Site F Landfill
SSI	Statistically Significant Increase
SSL	Statistically Significant Level
SSP	Scrubber Sludge Pond
TAC	Texas Administrative Code
TCEQ	Texas Commission of Environmental Quality
TMPA	Texas Municipal Power Agency

Summary of 40 CFR Section § 257.90(e)(6) Groundwater Monitoring System Requirements and Site-Specific Compliance – Gibbons Creek Steam Electric Station		
§ 257.90(e)(6) *A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit. At a minimum, the summary must specify all of the following:*		**Site F Landfill, Scrubber Sludge Pond, Ash Ponds**
§257.90(e)(6)(i)	*At the start of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in § 257.94 or the assessment monitoring program in § 257.95.*	Assessment Monitoring Program
§257.90(e)(6)(ii)	*At the end of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in § 257.94 or the assessment monitoring program in § 257.95.*	Assessment Monitoring Program
§257.90(e)(6)(iii)	*If it was determined that there was a statistically significant increase over background for one or more constituents listed in appendix III to this part pursuant to § 257.94(e):*	Yes
§257.90(e)(6)(iii)(A)	*Identify those constituents listed in appendix III to this part and the names of the monitoring wells associated with such an increase.* **Note:** Site F Landfill, Scrubber Sludge Pond and Ash Ponds monitoring networks are all currently monitored under the Assessment Monitoring program; therefore, appendix IV constituents with statistically significant increases over background have been included in addition to appendix III constituents.	**Site F Landfill** SLF MW-2 • Calcium, Chloride, pH, TDS, Beryllium, Cadmium, Cobalt SLF MW-3 • Boron, Calcium, Chloride, pH, TDS, Arsenic, Beryllium, Cadmium, Cobalt, Lead, Mercury, Thallium SLF MW-4 • Boron, Calcium, Chloride, TDS SLF MW-5 • Boron, Calcium, Chloride, pH, TDS, Beryllium, Cadmium, Cobalt, Radium 226+228, Lithium, Thallium SLF MW-6 • Calcium, Chloride, pH, TDS, Arsenic, Beryllium, Cadmium, Cobalt, Radium 226+228, Lead, Lithium, Thallium SLF MW-7 • Boron, Chloride MNW-15 • Boron, Fluoride, pH, TDS, Arsenic, Beryllium, Cadmium, Chloride, Cobalt **Scrubber Sludge Pond & Ash Ponds** SSP MW-2 • Calcium, Chloride, pH, Arsenic, Beryllium, Cadmium, Cobalt SSP MW-3 • Boron, pH, Arsenic, Beryllium, Cadmium, Chromium, Cobalt, Radium 226+228, Thallium SSP MW-4 • pH, Chromium, Molybdenum AP MW-1D • Boron, Fluoride, Arsenic, Cobalt, Molybdenum

Summary of 40 CFR Section § 257.90(e)(6) Groundwater Monitoring System Requirements and Site-Specific Compliance – Gibbons Creek Steam Electric Station		
§ 257.90(e)(6) *A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit. At a minimum, the summary must specify all of the following:*		**Site F Landfill, Scrubber Sludge Pond, Ash Ponds**
		AP MW-3 • Boron, pH, Beryllium, Cadmium, Cobalt, Mercury AP MW-4 • Boron AP MW-5 • Boron, Fluoride, pH, TDS, Arsenic, Beryllium, Cadmium, Cobalt, Mercury, Thallium
§257.90(e)(6)(iii)(B)	*Provide the date when the assessment monitoring program was initiated for the CCR unit.*	March 2018
§257.90(e)(6)(iv)	*If it was determined that there was a statistically significant level above the groundwater protection standard for one or more constituents listed in appendix IV to this part pursuant to § 257.95(g) include all of the following:*	Yes – Alternate Source Demonstration (ASD) provided as part of the 2019 Annual Groundwater Monitoring & Corrective Action Annual Report. Further discussion of this ASD is provided within this report.
§257.90(e)(6)(iv)(A)	*Identify those constituents listed in appendix IV to this part and the names of the monitoring wells associated with such an increase.*	**Site F Landfill** SLF MW-2 • Cobalt SLF MW-3 • Beryllium, Cadmium, Cobalt, Lead, Thallium SLF MW-5 • Beryllium, Cobalt, Lithium SLF MW-6 • Beryllium, Cadmium, Cobalt, Lithium, Thallium MNW-15 • Beryllium, Cadmium, Cobalt **Scrubber Sludge Pond & Ash Ponds** SSP MW-2 • Beryllium, Cobalt SSP MW-3 • Beryllium, Cadmium, Cobalt, Radium 226+228, Thallium AP MW-1D • Cobalt AP MW-3 • Cobalt AP MW-5 • Beryllium, Cadmium, Cobalt
§257.90(e)(6)(iv)(B)	*Provide the date when the assessment of corrective measures was initiated for the CCR unit.*	N/A – Currently monitored under assessment monitoring.

Summary of 40 CFR Section § 257.90(e)(6) Groundwater Monitoring System Requirements and Site-Specific Compliance – Gibbons Creek Steam Electric Station		
§ 257.90(e)(6) *A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit. At a minimum, the summary must specify all of the following:*		**Site F Landfill, Scrubber Sludge Pond, Ash Ponds**
§257.90(e)(6)(iv)(C)	*Provide the date when the public meeting was held for the assessment of corrective measures for the CCR unit.*	N/A – Currently monitored under assessment monitoring.
§257.90(e)(6)(iv)(D)	*Provide the date when the assessment of corrective measures was completed for the CCR unit.*	N/A – Currently monitored under assessment monitoring.
§257.90(e)(6)(v)	*Whether a remedy was selected pursuant to § 257.97 during the current annual reporting period, and if so, the date of remedy selection.*	N/A – Currently monitored under assessment monitoring.
§257.90(e)(6)(vi)	*Whether remedial activities were initiated or are ongoing pursuant to § 257.98 during the current annual reporting period.*	N/A – Currently monitored under assessment monitoring.

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1 Introduction

On April 17, 2015, the United States Environmental Protection Agency (EPA) published the final rule for the regulation and management of coal combustion residual (CCR) under Subtitle D of the Resource Conservation and Recovery Act. The CCR rule is formally promulgated in the U.S. Code of Federal Regulations (CFR), Title 40, Part 257. The rule – effective on October 19, 2015 – applies to electric utilities and independent power producers that fall within North American Industry Codes System code 221112, and facilities that produce or store CCR materials in surface impoundments or landfills (EPA, 2015). The CCR rule defines a set of requirements for the disposal and handling of CCR within units (defined as either landfills or surface impoundments).

The former Gibbons Creek Steam Electric Station (GCSES or Site) is the site of a former coal-fired power generation facility located in Anderson, Texas (**Figure 1**). The Texas Municipal Power Agency (TMPA) operated GCSES between 1982 and 2019. The Gibbons Creek Environmental Redevelopment Group, LLC (GCERG) acquired the TMPA property in 2021. At the GCSES, one CCR landfill identified as the Site F Landfill (SFL), and two CCR surface impoundments, the Scrubber Sludge Pond (SSP) and Ash Ponds (AP) are subject to the regulations under 40 CFR §257 Subpart D and Texas Commission of Environmental Quality's (TCEQ) Title 30, Texas Administrative Code (30 TAC), Chapter 352. On June 1, 2021, the EPA signed a Federal Register notice approving of the state permit program for the management of CCR in the state of Texas. The locations of the CCR units are shown on **Figure 2** and **Figure 3**.

The SFL, located northeast of the power generating plant and constructed in 1990 and received solid CCR generated by the GCSES (**Figure 2**). The SSP was constructed and began receiving CCR in 1982. The AP consists of three interconnected ponds (Pond A, B and C) that began operating with the start-up of the GCSES in 1982. See **Figure 3** for location of SSP and AP.

In accordance with 40 CFR §257.91 and TCEQ TAC 30 Chapter 352, TMPA installed a groundwater monitoring system around both the SFL and the SSP/AP CCR units. GCERG has continued implementation of the federal CCR Rule groundwater monitoring program, as required by 40 CFR §257.90-95, as a continuation of the TMPA monitoring program.

2 Facility Description

The GCSES is located at 12824 FM 244 Road, Anderson, Texas 77830. The GCSES was a single unit, 470-megawatt, coal-fired power plant. The GCSES initially operated by burning lignite from the adjacent Gibbons Creek Lignite Mine in 1982. In 1996, the GCSES converted to Powder River Basin coal and the lignite mine was closed. The GCSES was retired from the Electric Reliability Council of Texas (ERCOT) System on October 30, 2019. The Site was obtained by the GCERG in 2021.

The APs are an unlined, interconnected, three-cell impoundment area which are separated by earthen dikes, constructed in 1977 to 1978 as part of the original GCSES construction. These ponds are approximately 260 ft wide, 1,800 ft long and 20 ft deep. The top of the perimeter berms/dikes are at an elevation of approximately 270 feet above mean sea level (AMSL). See **Figure 3** for location of the APs.

The SSP is located to the west of the APs and is a single impoundment constructed in 1977 to 1978. A liner was added to the bottom of the pond in 1983. The pond measurements are approximately 260 feet and 350 feet wide and 615 feet and 635 feet long (measured at the bottom of the impoundment). See **Figure 3** for location of the SSP.

The SFL, located northeast of the power generating plant and constructed in 1990, is approximately 114 acres and received solid CCR generated by the GCSES.

Following the acquisition of the TMPA property in 2021, GCERG has initiated the process of dewatering and removing CCR material from the SSP & AP CCR units as part of pond remediation and clean closure efforts. Dewatering of the SSP/AP CCR units began in June 2021 and removal of ash is anticipated to be completed by January 2022 for the SSP CCR unit and by March 2022 for the AP CCR unit. The CCR material removed from the SSP/AP CCR units is being placed within the SFL CCR unit. In addition, the SFL CCR unit stormwater collection pond is currently being cleaned out, all stormwater control ditches around the area of the coal pile and coal pile runoff pond are being excavated, and the coal pile itself is being removed. All of these excavated materials are being dewatered and placed within the SFL CCR unit.

Upon removal of all CCR materials from the SSP/AP CCR units, the coal pile, coal pile runoff ditches and the SFL CCR unit stormwater collection pond, the SFL CCR unit will be closed with the following capping system:

- 6-inches of erosion layer;
- Underlain by 18-inches of infiltration layer;
- Underlain by a geocomposite;
- Underlain by a 40-mil low-linear density polyethylene (LLDPE) geomembrane layer;
- Underlain by 2-feet of recompacted clay liner (RCL) with a hydraulic conductivity of $1x10^{-5}$ centimeters per second (cm/sec) or slower;
- Underlain by 1-foot of intermediate cover.

All closure activities associated with the SSP/AP CCR units ash removal, SFL stormwater pond cleanout, stormwater ditch cleaning, coal pile removal, and closure of the SFL CCR unit is anticipated to be completed by end of year 2023.

3 Hydrogeology

3.1 Site F Landfill

The SFL is underlain by stratified, heterogeneous layers of clays, silts, and sands of varying thicknesses. Sandstone was observed at some boring locations as well. The elevation of screened intervals in monitoring wells range from approximately 250 feet to 220 feet AMSL. The screened intervals are generally completed in silty sands (SM) with intervals of clayey sands and silts.

Groundwater investigations by others (Wood, 2021) indicated that groundwater flow direction beneath the SFL was generally from the northwest towards the southeast. Groundwater level monitoring completed by Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), using an expanded monitoring network confirmed the general groundwater flow

gradient from northwest to southeast, but influence from the Gibbons Creek Reservoir on groundwater flow direction was observed.

3.2 Scrubber Sludge Pond/Ash Ponds

The SSP/AP CCR units are underlain by interbedded silty and sandy clays, clay, clayey sands and silty sand. Hard sandstone intervals are intermittently present, as are thin lenses of lignite or lignitic silts. Groundwater is considered confined to semi-confined, and generally encountered at depths of 30 to 40 feet below ground surface. The elevation of monitoring well screened intervals ranges from approximately 240 ft to 220 ft AMSL.

Groundwater investigations by others (Wood, 2021) indicated that groundwater flow directions are controlled by the local topography and a groundwater divide exists between the AP CCR unit and the SSP CCR unit. Groundwater level monitoring completed by Amec Foster Wheeler using an expanded monitoring network confirms the presence of the groundwater divide and flow direction to the east beneath the APs. Groundwater flows to the southwest beneath the SSP. The background groundwater quality monitoring well (SSP/AP MW-1) is located on the groundwater divide and provides background data for both networks.

4 Monitoring Well Network

The CCR Rule requires, at a minimum, one upgradient and three downgradient monitoring wells per CCR unit to be completed in the uppermost aquifer. Section 40 CFR §257.90 of the Rule states that the operator: "…may install a multiunit groundwater monitoring system instead of separate groundwater monitoring systems for each CCR unit." In addition, the Rule states that downgradient monitoring wells should be installed to: "accurately represent the quality of groundwater passing the waste boundary of the CCR unit. The downgradient monitoring system must be installed at the waste boundary that ensures detection of groundwater contamination in the uppermost aquifer."

4.1 Site F Landfill

The SFL CCR unit monitoring well network (as shown on **Figure 2)** consist of both monitoring wells and piezometers installed by Amec Foster Wheeler in 2016 and 2017, and wells installed by Black and Veatch in 1988.

The SFL monitoring network consists of the following wells:

- Background Well: MNW-18
- Compliance Wells: SFL MW-2, SFL MW-3, SFL MW-4, SFL MW-5, SFL MW-6, SFL MW-7 and MNW-15
- Piezometers: MNW-11, MNW-16 and MNW-17

4.2 Scrubber Sludge Pond / Ash Ponds

The SSP/AP CCR units monitoring well networks (as shown on **Figure 3)** consist of both monitoring wells and piezometers. The piezometers are used for water level data collection only, groundwater quality samples are only collected from monitoring wells. The monitoring well network includes:

- Background Well: SSP/AP MW-1 (used as background for both AP CCR unit and SSP CCR unit networks)
- Scrubber Sludge Pond Compliance Wells: SSP MW-2, SSP MW-3 and SSP MW-4
- Ash Ponds Compliance Wells: AP MW-1D, AP MW-3, AP MW-4 and AP MW-5
- Piezometers: SSP MW-1, AP MW-1, AP MW-6, AP MW-2, AP PZ-1, AP PZ-2, AP PZ-3 and AP PZ-4

5 Monitoring

TMPA initiated sample collection for background monitoring in June 2016 and completed the eighth round of background sampling, as required by the CCR Rule, in August 2017. In accordance with 40 CFR §257.94(b), one round of detection monitoring was completed in October 2017. A statistical evaluation of the groundwater quality data set for Appendix III constituents resulting from detection monitoring in accordance with 40 CFR § 257.94 was completed in January 2018. The data set used in the evaluation resulted from the collection and laboratory analysis of eight independent samples from background and downgradient wells in accordance with 40 CFR § 257.94(b). The statistical evaluation was completed using the prediction limit method outlined in 40 CFR § 257.93(f)(3) for the monitoring data obtained at the SFL CCR units and the SSP/AP CCR units. The statistical evaluation concluded initial statistically significant increases (SSIs) over background levels for Appendix III constituents at the SFL CCR unit and the SSP/AP CCR units (Wood, 2019). Based upon the results of the statistical evaluation, an assessment monitoring program was implemented in March 2018.

The first two initial rounds of the assessment monitoring program were conducted in March 2018 and June 2018. Groundwater samples were collected from monitoring wells at the SFL CCR unit and the SSP/AP CCR units. During the initial assessment monitoring sampling event (March 2018), the groundwater samples were analyzed for all Appendix III and Appendix IV constituents. During the second assessment monitoring sampling event (June 2018), the groundwater samples were analyzed for all Appendix III constituents and those Appendix IV constituents that were detected at each CCR unit during the March 2018 monitoring event.

Assessment monitoring was continued in 2019, at which point multiple statistically significant levels (SSLs) of Appendix IV constituents were determined to be above their respective groundwater protection standard (GWPS) (Wood, 2020). As part of the 2019 Annual Groundwater Monitoring and Corrective Action Annual Report, and alternate source demonstration (ASD) was submitted (Wood, 2020). This ASD describes the natural conditions in and around the Site, as well as the impact of naturally occurring lignite within the area of the Site and its impact on the groundwater system. As documented in the 2019 ASD evaluation, potential SSLs identified for Appendix IV constituents are attributed to an alternate source under the CCR rule; therefore, no corrective action measures were required and groundwater monitoring under the assessment monitoring program was continued.

The 2021 reporting period consisted of two rounds of semi-annual groundwater sampling for assessment monitoring on the certified monitoring well networks. **Table 1** provides the well identification number, well gradient or use, the dates the samples were collected, and whether the sample was required by the CCR Rule for the background sampling, detection monitoring or assessment monitoring programs.

Table 1: Dates of groundwater samples collected for each well in 2021 and the required monitoring programs for the GCSES facility (40 CFR §257.90(e)(3)

Monitoring Well I.D.	Well Location	Dates Monitored	CCR Rule Monitoring Purpose
AP MW-1	Water Level Only	February 9-10, 2021 July 12-13, 2021	Water Level Monitoring
AP MW-1D	Downgradient	February 9-10, 2021 July 12-13, 2021	Assessment Monitoring
AP MW-2	Water Level Only	February 9-10, 2021 July 12-13, 2021	Water Level Monitoring
AP MW-3	Downgradient	February 9-10, 2021 July 12-13, 2021	Assessment Monitoring
AP MW-4	Downgradient	February 9-10, 2021 July 12-13, 2021	Assessment Monitoring
AP MW-5	Downgradient	February 9-10, 2021 July 12-13, 2021	Assessment Monitoring
AP MW-6	Water Level Only	February 9-10, 2021 July 12-13, 2021	Water Level Monitoring
AP PZ-1	Water Level Only	February 9-10, 2021 July 12-13, 2021	Water Level Monitoring
AP PZ-2	Water Level Only	February 9-10, 2021 July 12-13, 2021	Water Level Monitoring
AP PZ-3	Water Level Only	February 9-10, 2021 July 12-13, 2021	Water Level Monitoring
AP PZ-4	Water Level Only	February 9-10, 2021 July 12-13, 2021	Water Level Monitoring
SSP/AP MW-1	Background/Upgradient	February 9-10, 2021 July 12-13, 2021	Assessment Monitoring
SSP MW-1	Water Level Only	February 9-10, 2021 July 12-13, 2021	Water Level Monitoring
SSP MW-2	Downgradient	February 9-10, 2021 July 12-13, 2021	Assessment Monitoring
SSP MW-3	Downgradient	February 9-10, 2021 July 12-13, 2021	Assessment Monitoring
SSP MW-4	Downgradient	February 9-10, 2021 July 12-13, 2021	Assessment Monitoring
SFL MW-2	Downgradient	February 9-10, 2021 July 12-13, 2021	Assessment Monitoring
SFL MW-3	Downgradient	February 9-10, 2021 July 12-13, 2021	Assessment Monitoring
SFL MW-4	Downgradient	February 9-10, 2021 July 12-13, 2021	Assessment Monitoring
SFL MW-5	Downgradient	February 9-10, 2021 July 12-13, 2021	Assessment Monitoring
SFL MW-6	Downgradient	February 9-10, 2021 July 12-13, 2021	Assessment Monitoring
SFL MW-7	Downgradient	February 9-10, 2021 July 12-13, 2021	Assessment Monitoring
MNW-11	Water Level Only	February 9-10, 2021 July 12-13, 2021	Water Level Monitoring
MNW-15	Downgradient	February 9-10, 2021 July 12-13, 2021	Assessment Monitoring
MNW-16	Water Level Only	February 9-10, 2021 July 12-13, 2021	Water Level Monitoring
MNW-17	Water Level Only	February 9-10, 2021 July 12-13, 2021	Water Level Monitoring
MNW-18	Background/Upgradient	February 9-10, 2021 July 12-13, 2021	Assessment Monitoring

5.1 Water Levels and Sample Collection

Water levels were collected in each well following the Groundwater Monitoring Plan (Amec Foster Wheeler, 2017). Water levels were measured before well purging began. Wells were purged until field parameters (pH, turbidity, conductivity, dissolved oxygen, temperature, and oxidation reduction potential) stabilized. Purging and sampling was conducted using either a peristaltic pump and dedicated tubing or submersible bladder pump with disposal bladder and disposable tubing, depending on the depth of water. The results of field measurements were recorded on field data forms (**Appendix B**), which are maintained as part of the field records. After field parameters stabilized, samples were collected and analyzed for the parameters listed in **Table 2**. Two rounds of assessment monitoring samples were collected from each well in 2021. For quality control, one field duplicate sample was collected during each sample event. Groundwater samples for the February and July 2021 events were delivered under Chain of Custody to Eurofins TestAmerica Laboratories in Pittsburgh, Pennsylvania.

5.2 Analytical Testing

Samples were obtained for assessment monitoring in February and July 2021 and were analyzed for all Appendix III and Appendix IV parameters, as listed in **Table 2**.

Table 2: Constituents of Interest

Appendix III Constituents	Appendix IV Constituents	
Boron	Antimony	Lead
Calcium	Arsenic	Lithium
Chloride	Barium	Mercury
Fluoride	Beryllium	Molybdenum
pH	Cadmium	Selenium
Sulfate	Chromium	Thallium
Total Dissolved Solids (TDS)	Cobalt	Radium 226 and 228-Combined
	Fluoride	

5.3 Data Validation and Data Management

Data validation was conducted to eliminate data that did not meet validation criteria and designate a data qualifier for any data quality limitation discovered. All samples and quality control were reviewed and evaluated, and no samples were rejected. Most quality control analyses were within reportable limits; however, when quality control was outside limit controls, samples were reported as estimated.

According to the *Practical Guide for Ground-Water Sampling*: “Duplicate sample values which differ by less than ±50% relative percent difference indicates good error control” (Barcelona, 1985). All relative percent difference (RPD) values for both the February and July 2021 sampling events are below the recommended 50 percent.

Laboratory qualifiers were evaluated to determine whether data was acceptable for further analysis. The following qualifiers were noted for some parameters in the Eurofins TestAmerica laboratory report but did not impact the use of data for further analysis.

- B – Compound was found in the blank and sample.
    - SSP/AP MW-1 – Boron, Lead
    - AP MW-1D – Boron
    - AP MW-3 – Boron
    - AP MW-5 – Boron, Lead, Thallium
        - All compounds found within the Method Blank were J-flagged; therefore, are assumed values and are not treated as significant.
- J – Result is less than the reporting limit (RL) but greater than or equal to the laboratory method detection limit (MDL) and the concentration is an approximate value. Detections with J-flags are not considered as statistically significant results during analysis.
- F1 – MS and or MSD recovery exceeds control limits.
    - MNW-15 – Mercury
        - Mercury in MNW-15 was non-detect; therefore, no re-sample or re-analysis is necessary.
- H – Sample was prepped or analyzed beyond the specified holding time.
    - Total Dissolved Solids – AP MW-4, MNW-15, MNW-18, SFL MW-2, SFL MW-3, SFL MW-4, SLF MW-5, SLF MW-6, SFL MW-7, SSP MW-2. SSP MW-3 and SSP MW-4.
        - Values have been evaluated and have been determined to be within the historical ranges for each monitoring well.

6 Monitoring Results

6.1 Water Levels and Groundwater Flow Direction

Water levels at the monitoring wells are provided in **Table 3**. Potentiometric surface maps (**Appendix A - Figures 4** through **Figure 7**) were developed based on water levels measured in February and July 2021. The maps display the groundwater elevations at the monitoring wells/piezometers and the groundwater contours for both the SFL and the SSP/AP CCR units for both February and July 2021. Groundwater beneath the area of the SFL CCR unit is between 252 ft and 266 ft ASML and groundwater flow direction was generally southeasterly. Groundwater beneath the area of the SSP/AP CCR units is between 258 ft and 264 ft ASML.

Groundwater in the area of the SSP/AP CCR units continued to display a groundwater divide between the SSP CCR unit and the AP CCR unit for the February 2021 sampling event. During the July 2021 sampling event, the historically observed groundwater divide between the SSP CCR unit and the AP CCR unit was present, although not as pronounced, which is likely a result of the dewatering activities within the AP CCR unit.

Based on the February 2021 and July 2021 groundwater sampling events, the general groundwater flow patterns observed are consistent with historical observations for the SSP CCR unit (flow to the south-southwest) and the AP CCR unit (flow to the east).

Table 3. Groundwater elevations measured in 2021

Well ID	TOC Elevation (ft amsl)	Groundwater Elevation (ft amsl) Week of February 8, 2021	Groundwater Elevation (ft amsl) Week of July 12, 2021
AP MW-1[1]	271.56	258.34	258.53
AP MW-1D	272.04	257.21	257.56
AP MW-2[1]	274.97	267.46	262.32
AP MW-3	274.68	263.29	262.09
AP MW-4	274.16	260.64	259.47
AP MW-5	274.13	262.04	259.66
AP MW-6[1]	277.95	261.31	260.92
AP PZ-1[1]	265.67	259.03	260.31
AP PZ-2[1]	274.91	254.45	257.84
AP PZ-3[1]	259.11	253.11	254.35
AP PZ-4[1]	273.65	263.3	259.62
SSP MW-1[1]	281.18	265.32	267.23
SSP MW-2	283.66	259.82	260.64
SSP MW-3	283.97	255.79	256.85
SSP MW-4	283.86	259.21	259.38
SSP/AP MW-1	272.53	264.19	264.82
SFL MW-2	268.31	256.74	257.93
SFL MW-3	275.00	256.88	257.08
SFL MW-4	269.53	253.85	254.75
SFL MW-5	276.25	259.81	260.17
SFL MW-6	286.66	268.07	267.66
SFL MW-7	264.63	250.05	251.41
MNW-11[1]	267.95	247.68	247.25
MNW-15	257.331	251.11	252.45
MNW-16[1]	263.191	249.07	250.69
MNW-17[1]	293.724	260.22	264.36
MNW-18	270.755	262.40	262.05

Note:
[1] Wells are Water Level Only and are not sampled as part of the CCR monitoring networks.

6.2 Water Quality

In February 2021, semi-annual assessment monitoring samples were collected from the certified monitoring well network wells for both the SFL CCR unit and the SSP/AP CCR units. All samples were analyzed for all Appendix III and Appendix IV constituents. Water quality data tables are included in **Appendix C** and laboratory reports are provided in **Appendix D**. In accordance with 40 CFR §257.95(e), downgradient well concentrations from the February 2021 assessment monitoring event were compared against background values, and some concentrations were found to be above their respective background values. In accordance with

40 CFR §257.95(f), detected Appendix IV concentrations in downgradient wells were compared against their respective GWPS. To determine if an exceedance of a GWPS was observed at a statistically significant level, the 95% lower confidence limit (LCL) was calculated for each of the downgradient wells for each of the Appendix IV constituents. The data set used to calculate the LCL included all Appendix IV results from samples collected at the specific well since sampling under the CCR rule commenced. Therefore, most wells had between 8 and 15 sampling events that were used to calculate the LCL. The February 2021 LCL results for the SFL CCR unit are provided in **Table 4** and for the SSP/AP CCR units are provided in **Table 5**. Results that exceeded their respective GWPS are shown in bold and underline.

Table 4: Evaluation for SSLs over GWPS – February 2021 (Site F Landfill)

	GWPS[1]	Units	SFL MW-2	SFL MW-3	SFL MW-4	SFL MW-5	SFL MW-6	SFL MW-7	MNW-15
	Appendix IV Constituents – Lower Confidence Levels								
Antimony	*0.006*	*mg/L*	0.002	0.002	0.002	0.002	0.002	0.000579	0.002
Arsenic	*0.01*	*mg/L*	0.001	0.001	0.001	0.001	0.00836	0.001	0.001
Barium	*2*	*mg/L*	0.02	0.01819	0.02138	0.0192	0.0309	0.03115	0.0171
Beryllium	*0.004*	*mg/L*	0.00123	**0.03309**	0.001	**0.00947**	**0.04712**	0.001	**0.06899**
Cadmium	*0.005*	*mg/L*	0.000761	**0.006559**	0.001	0.001	**0.009341**	0.001	**0.06932**
Chromium	*0.1*	*mg/L*	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Cobalt	*0.006*	*mg/L*	0.0005	**0.0598**	0.0005	**0.04671**	**0.1071**	0.0005	**0.2759**
Fluoride	*4*	*mg/L*	0.2	0.5	0.3	0.2	0.5	0.1	0.4
Lead	*0.015*	*mg/L*	0.001	**0.0183**	0.001	0.000725	0.001	0.000211	0.000555
Lithium	*0.552[2]*	*mg/L*	0.4334	0.2786	0.3969	**0.643**	**0.622**	0.3986	0.06494
Mercury	*0.002*	*mg/L*	0.0002	0.001823	0.0002	0.0002	0.0002	0.0002	0.0002
Molybdenum	*0.1*	*mg/L*	0.00202	0.005	0.00106	0.0018	0.005	0.005	0.005
Radium 226+228	*10.1[2]*	*pCi/L*	7.068	4.464	1.202	9.934	8.23	1.955	0.371
Selenium	*0.05*	*mg/L*	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Thallium	*0.002*	*mg/L*	0.000612	**0.005532**	0.001	0.001	**0.003057**	0.001	0.000739

Bold and underlined concentration indicates an SSL over the GWPS.

[1] GWPS is established as the U.S. EPA Maximum Contaminant Level (MCL) or the GWPS specified in 40 CFR §257.95(h)(2); unless otherwise specified.

[2] GWPS is established as the background threshold value (BTV) when the background level is higher than the U.S. EPA MCL or the GWPS specified in 40 CFR §257.95(h)(2).

As shown in **Table 4**, results of the February 2021 sampling event indicated 16 SSLs for the SFL CCR unit for beryllium, cadmium, cobalt, lead, lithium, and thallium in various downgradient wells. The SSLs, except for thallium in SFL MW-3 and SFL MW-6, were previously detected SSLs and discussed in the 2019 ASD as part of the 2019 Annual Groundwater Monitoring and Corrective Action Plan (Wood, 2020).

Table 5: Evaluation for SSLs over GWPS – February 2021 (Scrubber Sludge and Ash Ponds)

	GWPS[1]	Units	SSP MW-2	SSP MW-3	SSP MW-4	AP MW-1D	AP MW-3	AP MW-4	AP MW-5
	Appendix IV Constituents – Lower Confidence Levels								
Antimony	*0.006*	*mg/L*	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Arsenic	*0.01*	*mg/L*	0.001	0.001	0.000941	0.001	0.001	0.000628	0.007399
Barium	*2*	*mg/L*	0.01821	0.01676	0.01853	0.009559	0.01654	0.01162	0.00941
Beryllium	*0.004*	*mg/L*	**0.02032**	**0.1087**	0.001	0.001	0.002	0.000436	**0.06958**
Cadmium	*0.005*	*mg/L*	0.001	**0.06366**	0.001	0.000408	0.001	0.001	**0.00769**
Chromium	*0.1*	*mg/L*	0.002	0.002	0.002	0.002	0.00173	0.002	0.002
Cobalt	*0.006*	*mg/L*	**0.0571**	**0.5535**	0.000336	0.0005	**0.03624**	0.0005	**0.1456**
Fluoride	*4*	*mg/L*	0.2	0.5	0.1	0.5571	0.1	0.1	1.1
Lead	*0.015*	*mg/L*	0.001	0.001	0.000161	0.001	0.000456	0.000276	0.001
Lithium	*1.66*[2]	*mg/L*	0.6851	0.5743	0.8171	0.0243	0.04407	0.7981	0.4203
Mercury	*0.002*	*mg/L*	0.0002	0.000162	0.0002	0.0002	0.0002	0.0002	0.0002
Molybdenum	*0.1*	*mg/L*	0.005	0.005	0.00321	0.005	0.000848	0.005	0.005
Radium 226+228	*5*	*pCi/L*	1.868	**27.41**	2.415	1.304	1.682	1.229	1.532
Selenium	*0.05*	*mg/L*	0.005	0.005	0.005	0.00154	0.005	0.005	0.005
Thallium	*0.002*	*mg/L*	0.000148	**0.008**	0.001	0.00031	0.000267	0.000172	0.001974

Bold and underlined concentration indicates an SSL over the GWPS.

[1] GWPS is established as the U.S. EPA Maximum Contaminant Level (MCL) or the GWPS specified in 40 CFR §257.95(h)(2); unless otherwise specified.

[2] GWPS is established as the background threshold value (BTV) when the background level is higher than the U.S. EPA MCL or the GWPS specified in 40 CFR §257.95(h)(2).

As shown in **Table 5**, results of the February 2021 sampling event indicated 11 SSLs for the SSP/AP CCR units. The SSLs, except for cadmium in AP MW-5 and thallium in SSP MW-3, were previously detected SSLs and discussed in the 2019 ASD (Wood, 2020).

In July 2021, semi-annual assessment monitoring samples were collected from the certified monitoring well network wells and all samples were analyzed for Appendix III and Appendix IV constituents. Water quality data tables are included in **Appendix C** and laboratory reports are provided in **Appendix D**. Downgradient well concentrations from the July 2021 assessment monitoring event were found to be above background values. In accordance with 40 CFR §257.95(f), concentrations in downgradient wells were found to exceed GWPS. Therefore, in accordance with 40 CFR §257.95(g), downgradient well concentrations were statistically evaluated to determine if constituents are detected at SSL above the GWPS. The July 2021 LCL results for the SFL are provided in **Table 6**. Results that exceeded their respective GWPS are shown in bold and underline.

Table 6: Evaluation for SSLs over GWPS – July 2021 (Site F Landfill)

	GWPS[1]	Units	SFL MW-2	SFL MW-3	SFL MW-4	SFL MW-5	SFL MW-6	SFL MW-7	MNW-15
	Appendix IV Constituents – Lower Confidence Levels								
Antimony	*0.00600*	*mg/L*	0.002	0.002	0.002	0.002	0.002	0.000579	0.002
Arsenic	*0.0100*	*mg/L*	0.001	0.001	0.001	0.001	0.008743	0.001	0.001
Barium	*2*	*mg/L*	0.02	0.01662	0.02188	0.0192	0.03106	0.03196	0.016
Beryllium	*0.00400*	*mg/L*	0.001329	**0.03293**	0.001	**0.009541**	**0.04702**	0.001	**0.06965**
Cadmium	*0.00500*	*mg/L*	0.000761	**0.006509**	0.001	0.001	**0.009417**	0.001	**0.0388**
Chromium	*0.100*	*mg/L*	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Cobalt	*0.00600*	*mg/L*	**0.01265**	**0.0598**	0.0005	**0.04706**	**0.1074**	0.0005	**0.2788**
Fluoride	*4*	*mg/L*	0.2	0.5	0.204	0.2	0.5	0.19	0.4
Lead	*0.01500*	*mg/L*	0.000272	**0.01788**	0.001	0.000725	0.001	0.000211	0.000555
Lithium	*0.552[2]*	*mg/L*	0.4365	0.2793	0.397	**0.643**	**0.6232**	0.3976	0.06711
Mercury	*0.00200*	*mg/L*	0.0002	0.001782	0.0002	0.0002	0.0002	0.0002	0.0002
Molybdenum	*0.100*	*mg/L*	0.00202	0.005	0.00208	0.0018	0.005	0.005	0.005
Radium 226+228	*10.1[2]*	*pCi/L*	7.092	4.451	1.234	10.1	8.561	1.999	0.3817
Selenium	*0.0500*	*mg/L*	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Thallium	*0.00200*	*mg/L*	0.000865	**0.005515**	0.001	0.001	**0.003079**	0.001	0.000901

Bold and underlined concentration indicates an SSL over the GWPS.

[1] GWPS is established as the U.S. EPA Maximum Contaminant Level (MCL) or the GWPS specified in 40 CFR §257.95(h)(2); unless otherwise specified.

[2] GWPS is established as the background threshold value (BTV) when the background level is higher than the U.S. EPA MCL or the GWPS specified in 40 CFR §257.95(h)(2).

As shown in **Table 6**, results of the July 2021 sampling event indicated 17 SSLs for the SFL CCR unit for beryllium, cadmium, cobalt, lead, lithium, and thallium in various downgradient wells. The SSLs, except for cobalt in SFL MW-2, were previously detected SSLs and discussed in the 2019 ASD as part of the 2019 Annual Groundwater Monitoring and Corrective Action Plan (Wood, 2020).

Table 7: Evaluation for SSLs over GWPS – July 2021 (Scrubber Sludge and Ash Ponds)

	GWPS[1]	Units	SSP MW-2	SSP MW-3	SSP MW-4	AP MW-1D	AP MW-3	AP MW-4	AP MW-5
	Appendix IV Constituents – Lower Confidence Levels								
Antimony	*0.00600*	*mg/L*	0.002	0.002	0.000415	0.002	0.002	0.002	0.000664
Arsenic	*0.0100*	*mg/L*	0.001	0.001	0.000941	0.00756	0.001	0.000628	0.007734
Barium	*2*	*mg/L*	0.01991	0.0172	0.0182	0.009948	0.01749	0.01181	0.01066
Beryllium	*0.00400*	*mg/L*	**0.02169**	**0.1082**	0.001	0.001	0.002	0.000436	**0.06833**
Cadmium	*0.00500*	*mg/L*	0.001	**0.06441**	0.001	0.000408	0.001	0.001	**0.007553**
Chromium	*0.100*	*mg/L*	0.002	0.002	0.002	0.002	0.00173	0.002	0.002
Cobalt	*0.00600*	*mg/L*	**0.0571**	**0.5545**	0.000336	**0.01221**	**0.03817**	0.0005	**0.1472**
Fluoride	*4*	*mg/L*	0.2	0.466	0.227	0.5676	0.0577	0.1	1.158
Lead	*0.01500*	*mg/L*	0.001	0.001	0.000276	0.000256	0.00047	0.000276	0.001
Lithium	*1.66[2]*	*mg/L*	0.6905	0.5753	0.7861	0.02407	0.04466	0.7987	0.4193
Mercury	*0.00200*	*mg/L*	0.0002	0.000162	0.0002	0.0002	0.0002	0.0002	0.0002
Molybdenum	*0.100*	*mg/L*	0.005	0.000667	0.00321	0.01439	0.000848	0.005	0.005
Radium 226+228	*5*	*pCi/L*	1.923	**27.85**	2.295	1.381	1.742	1.212	1.591
Selenium	*0.0500*	*mg/L*	0.005	0.005	0.00441	0.00164	0.005	0.005	0.005
Thallium	*0.00200*	*mg/L*	0.000516	**0.009**	0.001	0.000636	0.000271	0.000172	0.001987

Bold and underlined concentration indicates an SSL over the GWPS.

[1] GWPS is established as the U.S. EPA Maximum Contaminant Level (MCL) or the GWPS specified in 40 CFR §257.95(h)(2); unless otherwise specified.

[2] GWPS is established as the background threshold value (BTV) when the background level is higher than the U.S. EPA MCL or the GWPS specified in 40 CFR §257.95(h)(2).

As shown in **Table 7**, results of the July 2021 sampling event indicated 12 SSLs for the SSP/AP CCR units. The SSLs, except for cobalt in AP MW-1D, were previously detected SSLs and discussed in the 2019 ASD as part of the 2019 Annual Groundwater Monitoring and Corrective Action Plan (Wood, 2020).

6.2.1 Expansion of ASD

As described in the 2019 ASD, the solubility of metal species such as beryllium, cobalt, and cadmium is dependent on the pH of the groundwater. The Eh-pH diagrams for beryllium and cobalt were evaluated as part of the 2019 ASD and indicated that the solubility of the metals increased with lower pH ranges. Additionally, the ASD stated geochemical literature indicates that maximum adsorption for cadmium occurs at or above pH 6.5 and as the pH drops into the acidic range then desorption occurs. This was evident with higher metal detections in the wells exhibiting the lowest pH values. The ASD also discussed the low pH groundwater observed in downgradient monitoring wells is likely a result of weathering pyrite in the stringers of lignite coal found throughout the site. Natural acidic seeps are commonly found in lignite deposits, resulting in acidification of surrounding groundwater.

As part of the 2019 ASD, leachate samples collected from the SFL CCR unit in July 2003 were reviewed and showed alkaline characteristics, ranging from 8.6 to 9.7. Landfill wells with detected SSLs (SFL MW-3, SFL MW-5, SFL MW-6, and MNW-15) have pH values ranging from 3.3 to 5.1. The pH of the AP CCR unit was reviewed and showed neutral to slightly basic pH,

ranging from 7.5 to 8.5 or greater, based on historic sampling of the AP CCR unit outfall. SSP CCR unit pH of 7.8 was similar to the AP CCR unit. SSP CCR unit wells with detected SSLs (SSP MW-2, SSP MW-3, AP MW-3, and AP MW-5) have pH values ranging from 3.2 to 5.8. Based on these sample results and the natural weathering of shallow lignite at the site, the low pH groundwater is likely due to natural processes in the uppermost aquifer.

Although cadmium in AP MW-5 was not included in the 2019 ASD, the low pH levels in AP MW-5 are similar to those wells with elevated cadmium and low pH discussed in the ASD (SSP MW-3, SFL MW-3, SFL MW-6, and MNW-15). Therefore, it is concluded that cadmium at AP MW-5 is attributed to the alternate source of lignite deposits and low pH and not a release of the AP CCR unit.

Discussion of thallium was not included in the 2019 ASD. Information on thallium mobility in groundwater suggests that thallium is relatively immobile under typical pH conditions and increases in mobility under acidic conditions, as stated in a technical report by the Electric Power Research Institute (EPRI) dated December 2, 2008 (EPRI, 2008). This is similar to the other metals (beryllium, cobalt, cadmium) discussed in the 2019 ASD that become more mobile in groundwater with low pH, resulting in the higher concentrations observed. This information, coupled with the previously provided ASD, leads to the determination that thallium concentrations at SFL MW-3, SFL MW-6, and SSP MW-3 are a result of natural weathering of shallow lignite and not due to a release from the SFL CCR unit.

As discussed within the 2019 ASD, cobalt concentrations are highly pH-dependent, and concentrations of cobalt increase as pH decreases. Based on the findings provided within the 2019 ASD, the pH within the AP CCR unit is basic, ranging from 7.5 to 8.5 or greater. Based on these values, the AP CCR unit is not a source of low pH groundwater. The cobalt concentrations observed at AP MW-1D are lower than those concentrations which are found within monitoring wells AP MW-3 and AP MW-5, both of which have successfully been shown to have increased cobalt concentrations from an alternate source. In addition, based on the findings of the 2019 ASD, the cobalt concentrations which have been observed at monitoring well SFL MW-2 are determined to be a result of the naturally occurring lignite weathering in the area of the SFL CCR unit. SFL MW-2 Eh-pH conditions are at within the approximate range of groundwater conditions for elevated cobalt concentrations, as discussed in the 2019 ASD.

With the previous 2019 ASD and the applicability of the previous 2019 ASD to the newly identified SSLs over GWPS, the SFL CCR unit and the SSP/AP CCR units will continue to be monitored in accordance with the assessment monitoring program, as specified in 40 CFR §257.95(b).

In 2021, GCERG will continue to monitor groundwater at the Site in accordance with the assessment monitoring program and consistent with 40 CFR §257.93(e).

7 Summary

The following observations are based on CCR Rule compliance groundwater monitoring program development during 2021:

- GCERG initiated clean closure of the SSP/AP CCR units by implementing dewatering of the CCR units in June 2021 and conducting ash removal, with anticipated completion dates of January 2022 for the SSP CCR unit and March 2022 for the AP CCR unit.
- Removal of coal from the coal pile storage area, excavation of coal pile stormwater runoff devices and cleaning out of the SFL CCR unit stormwater collection pond have been implemented as of June 2021.
- Placement of CCR material removed from the SSP/AP CCR units, coal from the coal pile storage area, excavated material from the coal pile stormwater runoff devices and material removed from the SFL CCR unit stormwater collection pond will be placed within the SFL CCR unit, which will be capped as described in **Section 2**. The final closure of the site is anticipated to be complete at the end of year 2023.
- Water levels were measured at all monitoring wells in February 2021 and July 2021. Potentiometric surfaces were contoured for both the SFL CCR unit and the SSP/AP CCR units for both February and July 2021. A slight variation groundwater flow direction at the SSP/AP CCR units was observed between the February and July 2021 sample events is due to the dewatering of SSP/AP CCR units. Potentiometric surface maps are provided in **Attachment A**.
- All 16 wells of the certified well network for both the SLF CCR unit and SSP/AP CCR units were sampled in February 2021 for the assessment monitoring event. Assessment monitoring data was statistically evaluated, and SSLs above the GWPS were observed at multiple monitoring wells as provided in **Table 4** and **Table 5**.
- All 16 wells of the certified well network were sampled in July 2021 for the assessment monitoring event. Assessment monitoring data was statistically evaluated, and SSLs above the GWPS were observed at multiple monitoring wells as provided in **Table 6** and **Table 7**.
- An expansion of the 2019 ASD for newly determined SSLs has been provided within **Section 6.2.1**.
- The status of the GCSES at the end of 2021 is assessment monitoring. The next semi-annual sampling event is anticipated to occur in January 2022.

8 References

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Appendix A

Monitoring Networks & Potentiometric Surface Maps

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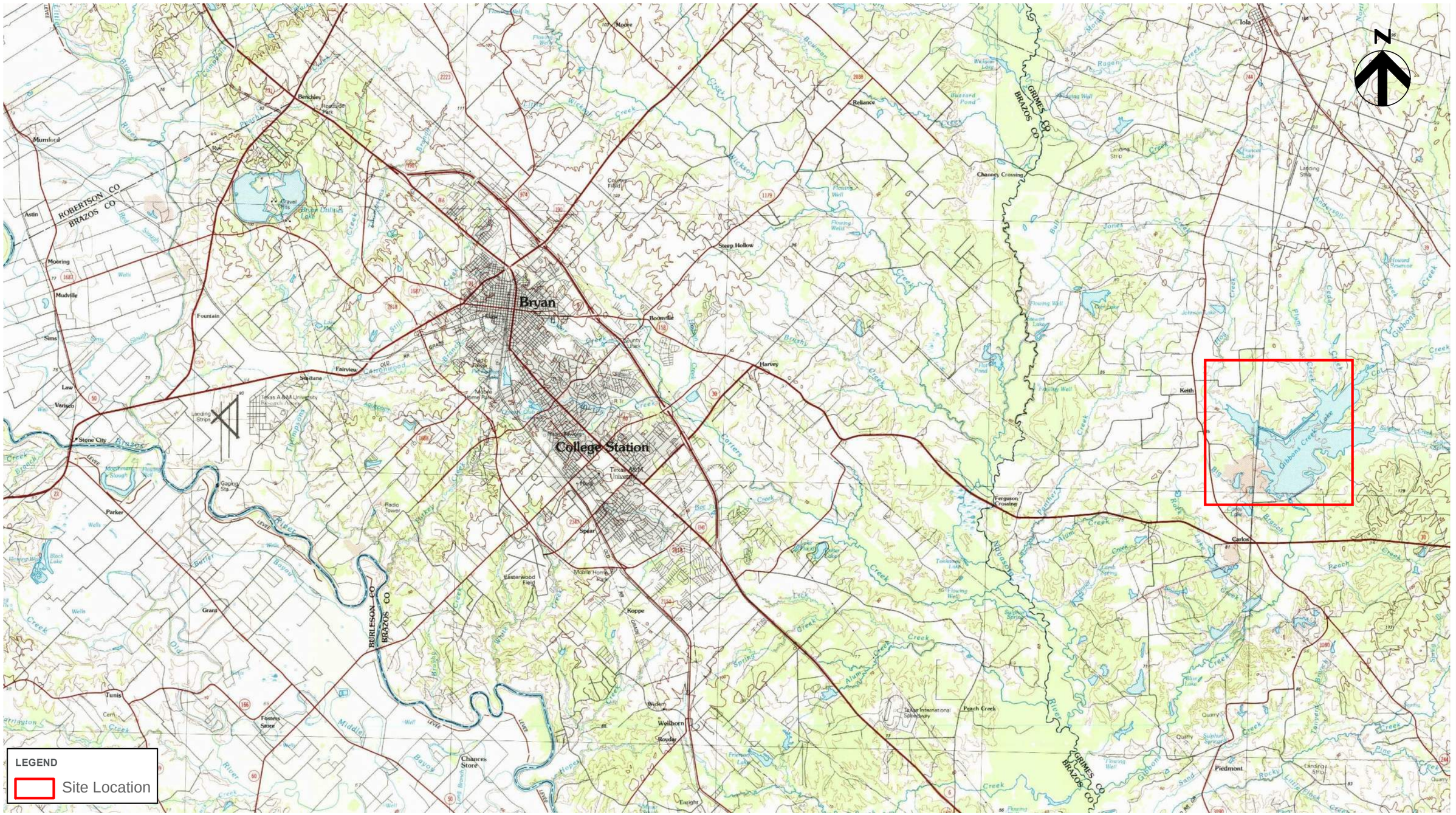

GIBBONS CREEK STEAM ELECTRIC STATION
GC ENVIRONMENTAL REDEVELOPMENT GROUP
SITE LOCATION MAP

2021 GROUNDWATER MONITORING & CORRECTIVE ACTION REPORT

DATE
MAY 2021

FIGURE
FIGURE 1

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N

700 0 700 1400

SCALE IN FEET

LEGEND:

MONITORING WELL

WASTE BOUNDARY

GIBBONS CREEK STEAM ELECTRIC STATION
GC ENVIRONMENTAL REDEVELOPMENT GROUP
MONITORING NETWORK - SITE F LANDFILL

2021 GROUNDWATER MONITORING & CORRECTIVE ACTION REPORT

DATE
MAY 2021

FIGURE
FIGURE 2

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N

400 0 400 800

SCALE IN FEET

LEGEND:

MONITORING WELL

POND BOUNDARIES

GIBBONS CREEK STEAM ELECTRIC STATION
GC ENVIRONMENTAL REDEVELOPMENT GROUP
MONITORING NETWORK - ASH PONDS/SCRUBBER SLUDGE

2021 GROUNDWATER MONITORING & CORRECTIVE ACTION REPORT

DATE
MAY 2021

FIGURE
FIGURE 3

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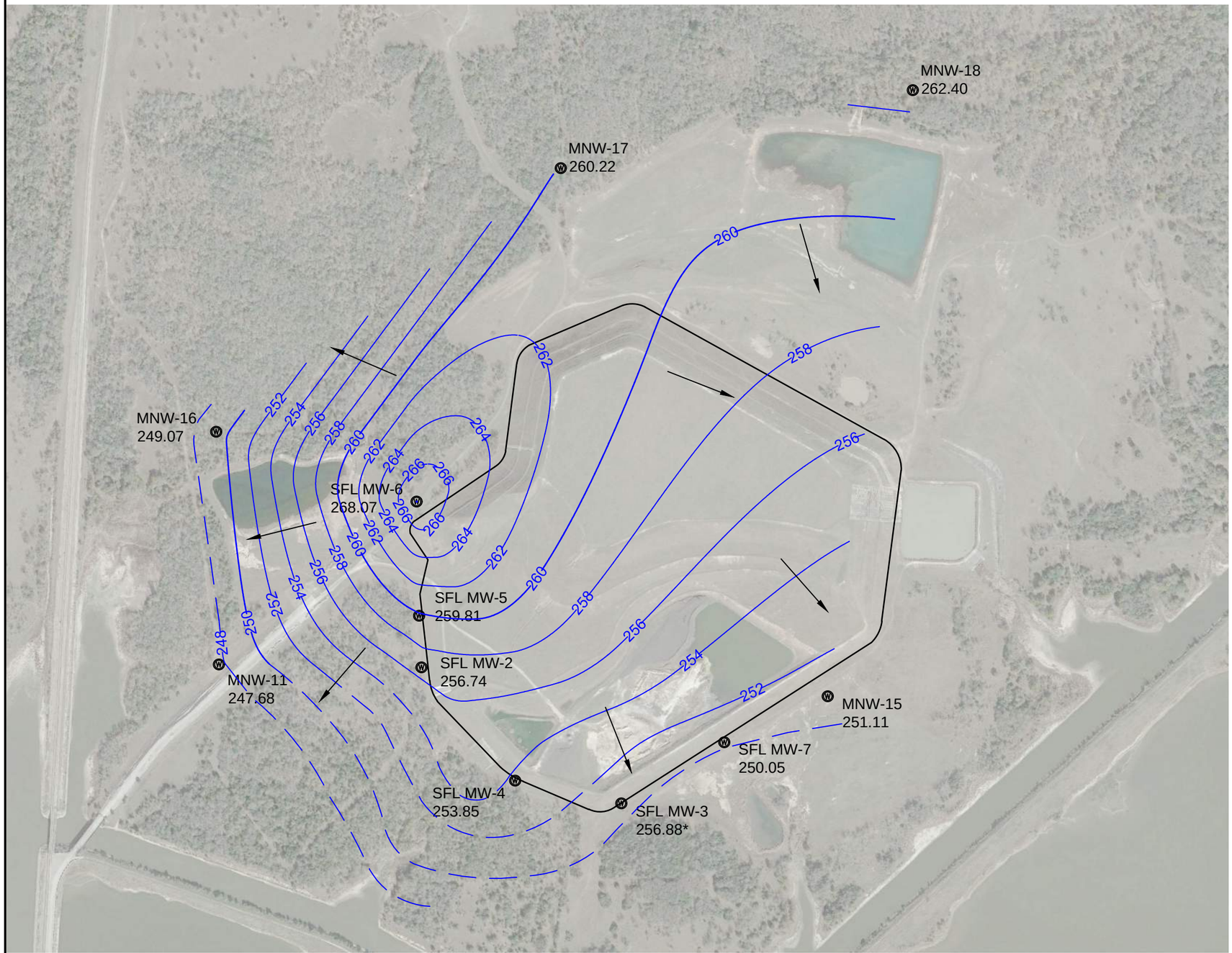

N

600 0 600 1200

SCALE IN FEET

LEGEND:

- MONITORING WELL
- WASTE BOUNDARY
- GROUNDWATER CONTOUR
- INFERRED GROUNDWATER CONTOUR
- FLOW DIRECTION

NOTES:

1. " * " DENOTES STATIC WATER LEVEL WAS NOT UTILIZED IN GENERATION OF GROUNDWATER CONTOUR MAP DUE TO ANOMALOUS VALUE COMPARED TO SURROUNDING WELLS.

GIBBONS CREEK STEAM ELECTRIC STATION
GC ENVIRONMENTAL REDEVELOPMENT GROUP
SITE F LANDFILL - FEBRUARY 2021 CONTOUR MAP

2021 GROUNDWATER MONITORING & CORRECTIVE ACTION REPORT

DATE
MAY 2021

FIGURE
FIGURE 4

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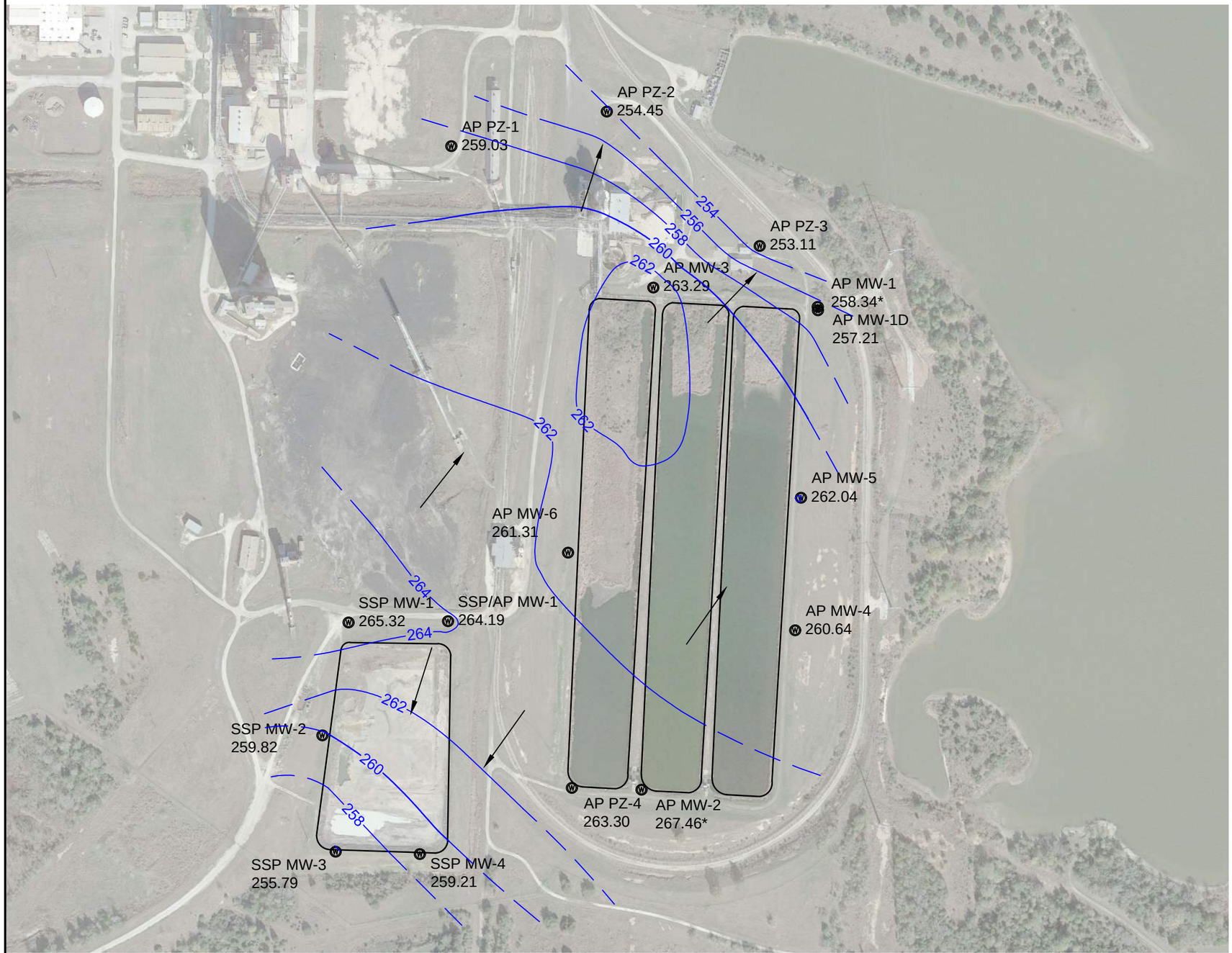

N

400 0 400 800

SCALE IN FEET

LEGEND:

- MONITORING WELL
- POND BOUNDARIES
- GROUNDWATER CONTOUR
- INFERRED GROUNDWATER CONTOUR
- FLOW DIRECTION

NOTES:

1. " * " DENOTES STATIC WATER LEVEL WAS NOT UTILIZED IN GENERATION OF GROUNDWATER CONTOUR MAP DUE TO ANOMALOUS VALUE COMPARED TO SURROUNDING WELLS.

GIBBONS CREEK STEAM ELECTRIC STATION
GC ENVIRONMENTAL REDEVELOPMENT GROUP
ASH PONDS/SCRUBBER SLUDGE - FEBRUARY 2021 CONTOUR MAP

2021 GROUNDWATER MONITORING & CORRECTIVE ACTION REPORT

DATE
MAY 2021

FIGURE
FIGURE 4

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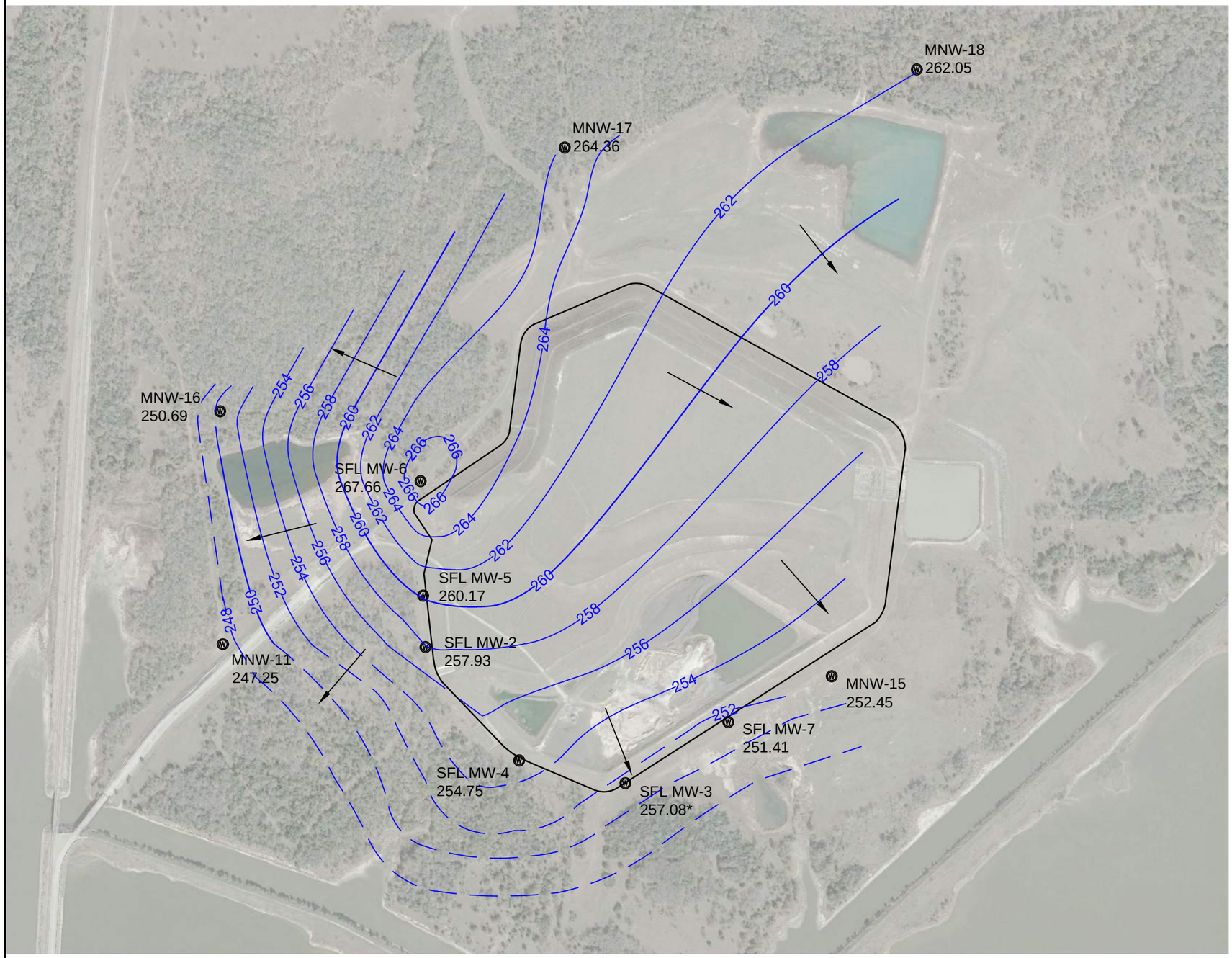

N

600 0 600 1200

SCALE IN FEET

LEGEND:

- MONITORING WELL
- WASTE BOUNDARY
- GROUNDWATER CONTOUR
- INFERRED GROUNDWATER CONTOUR
- FLOW DIRECTION

NOTES:

1. " * " DENOTES STATIC WATER LEVEL WAS NOT UTILIZED IN GENERATION OF GROUNDWATER CONTOUR MAP DUE TO ANOMALOUS VALUE COMPARED TO SURROUNDING WELLS.

GIBBONS CREEK STEAM ELECTRIC STATION
GC ENVIRONMENTAL REDEVELOPMENT GROUP
SITE F LANDFILL - JULY 2021 CONTOUR MAP

2021 GROUNDWATER MONITORING & CORRECTIVE ACTION REPORT

DATE
AUGUST 2021

FIGURE
FIGURE 6

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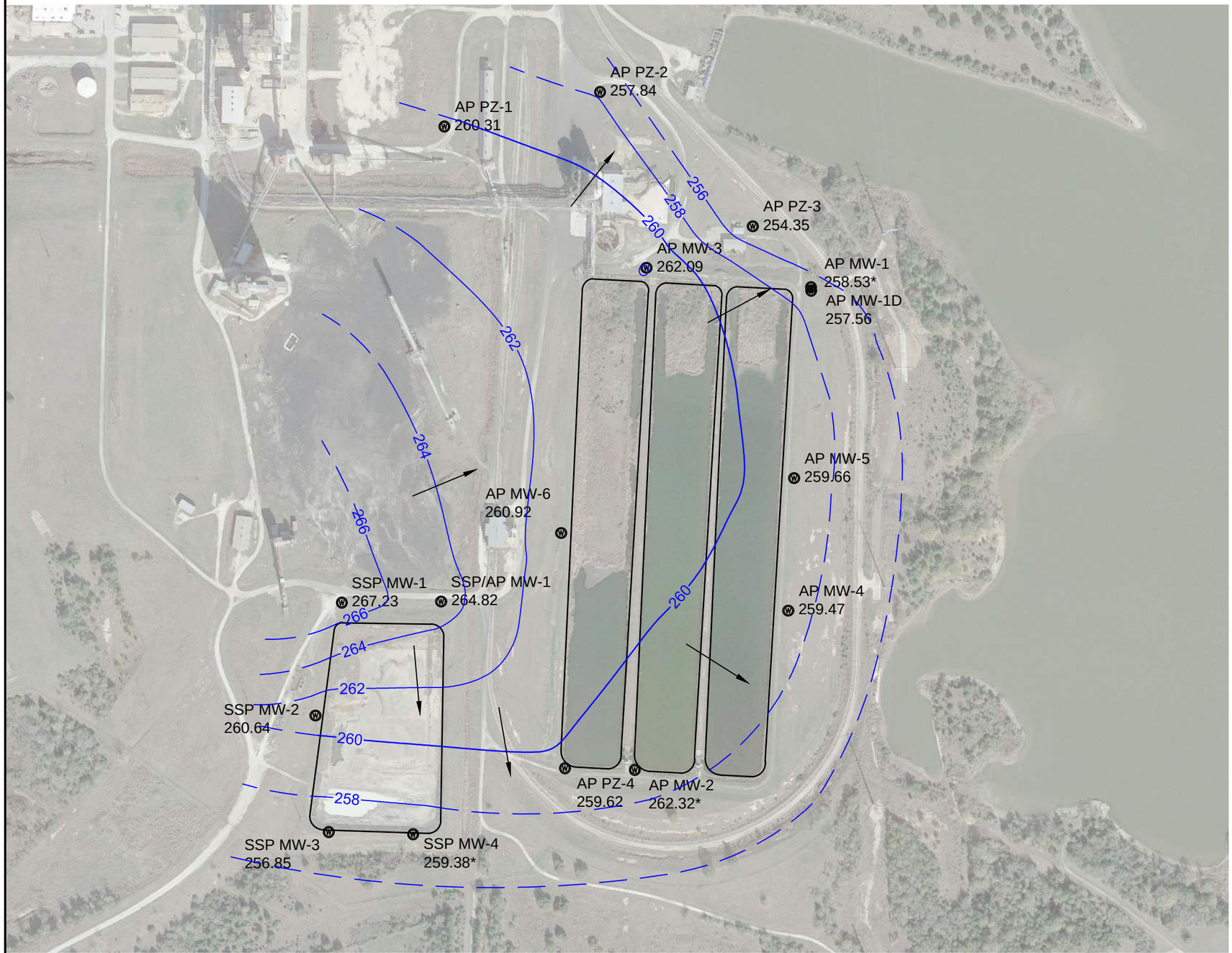

LEGEND:

- MONITORING WELL
- POND BOUNDARIES
- GROUNDWATER CONTOUR
- INFERRED GROUNDWATER CONTOUR
- FLOW DIRECTION

NOTES:

1. " * " DENOTES STATIC WATER LEVEL WAS NOT UTILIZED IN GENERATION OF GROUNDWATER CONTOUR MAP DUE TO ANOMALOUS VALUE COMPARED TO SURROUNDING WELLS.

GIBBONS CREEK STEAM ELECTRIC STATION
GC ENVIRONMENTAL REDEVELOPMENT GROUP
ASH PONDS/SCRUBBER SLUDGE - JULY 2021 CONTOUR MAP

2021 GROUNDWATER MONITORING & CORRECTIVE ACTION REPORT

DATE
AUGUST 2021

FIGURE
FIGURE 7

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Appendix B

Field Forms

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Spring 2021

Gibbons Creek Steam Electric Station
Site Water Levels

HDR

Sampler: Will Nicholson / Jonathan Thompson Date: 2/9/2021 – 2/10/2021

Equipment: Geotech 100' Decontamination: Alconox with DI Rinse

Well	Water Level below TOC	Bottom of Casing	Prevoius Water Level Below TOC (06/24/2019)	Prevoius Water Level Below TOC (01/14/2019)	Notes
AP PZ-1	6.64	29.42	6.39	5.62	No Survey mark
AP PZ-2	20.46	43.21	17.19	17.15	
AP PZ-3	6.00	43.09	4.59	4.65	
AP PZ-4	10.35	45.31	9.54	8.86	
AP MW-1	13.22	25.10	12.47	12.66	
AP MW-1D	14.83	43.02	14.14	14.1	
AP MW-2	7.51	20.20	6.88	6.65	
AP MW-3	11.39	43.43	10.64	10.68	
AP MW-4	13.57	52.81	13.1	13.16	
AP MW-5	12.09	43.15	11.27	11.38	
AP MW-6	16.64	48.34	16.19	16.33	
SSP/SP MW-1	8.34	43.22	7.32	7.8	
SSP MW-1	15.86	31.85	14.36	14.46	—
SSP MW-2	23.84	47.08	21.18	21.82	
SSP MW-3	26.18	48.36	26.35	26.44	
SSP MW-4	24.65	51.58	23.87	23.82	
★ SFL MW-1	22.50	22.92	20.63	19.43	QUITE POSSIBLY DRY
SFL MW-2	~~33.3~~ 11.57	73.84	10.11	10.81	
SFL MW-3	18.12	28.22	16.39	17	
SFL MW-4	15.68	43.05	14.21	14.6	
SFL MW-5	16.44	24.43	15.03	15.8	
SFL MW-6	18.59	23.15	17.31	18.49	
SFL MW-7	14.58	58.32	13.17	12.64	
MNW-11	20.27	47.75	20.87	19.45	
MNW-15	6.22	24	4.02	3.81	
MNW-16	14.12	39.33	12.49	11.94	
MNW-17	33.5	50.30	43.85	34.82	
MNW-18	8.36	51.5	8.37	5.63	

Low Stress Groundwater Sampling Data Sheet

Facility Name: **Gibbons Creek Station**		Sampler Name(s):	WILL NICHOLSON / JONATHAN THOMPSON
MW Identification:	AP MW-1D	Date/Time:	2/10/21 1330
Sample Number:	4	PID Readings:	N/A
Weather Conditions:	42° F MIST 8 MPH NNW		
Wellhead Inspection:	NO COMMENT		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	14.83	7. Purge Rate (mL/min)	250
2. Intake Depth (±0.01 ft.)	38	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	43.02	8. Purge Equipment Used	BLADDER
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: NONE Turbidity: CLEAR		12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: CLEAR			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
13:35	-	19.7	1415	144.1	4.39	2.96	6.34	15.09	
13:38	750	19.9	1437	139.5	0.52	1.82	6.19	15.15	
13:41	1500	20.0	1448	137.4	0.17	1.01	6.16	15.20	
13:44	2250	20.1	1451	136.5	0.08	0.75	6.14	15.20	
13:47	3000	20.0	1451	136.2	0.03	0.60	6.14	15.15	
13:50	3750	20.0	1451	135.7	0.02	0.62	6.13	15.17	
13:53	4500	20.1	1453	135.2	0.00	0.45	6.13	15.17	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	13:55
3. Sampling Equip. Used	BLADDER	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR) /NITROGEN/ N/A		
5. Sample Rate (mL/min)	BLADDER		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

WILL NICHOLSON

Facility Name: **Gibbons Creek Station**	Sampler Name(s): JONATHAN THOMPSON
MW Identification: AP MW-3	Date/Time: 2/10/21 12:40
Sample Number: 13	PID Readings: N/A
Weather Conditions: 41° F CLOUDY 9 MPH NNW	
Wellhead Inspection: NO COMMENT	

Visual Inspection:

1. Survey Mark Present: (Yes) / No
2. Collision/Vandalism Damage: Yes / (No)
3. Casing Degradation: Yes / (No)
4. Well Subsidence: Yes / (No)
5. Standing/Ponded Water: Yes / (No)
6. Frost Heaving: Yes / (No)
7. Lock in Place: (Yes) / No

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.]) 11.39
2. Intake Depth (±0.01 ft.) 38
3. Bottom of casing (±0.01 ft.) 43.43
4. Casing Diameter (inches) 2
5. Actual Volume of Water Purged (mL) 4500
6. Purge Water Characteristics:
   Odor None Turbidity Clear
   Color Clear
7. Purge Rate (mL/min) 250
7. Water Level Measuring Equip. GEOTECH
8. Purge Equipment Used BLADDER
9. Dedicated? (Yes/No) Yes / (No)
10. Immiscible layer observed Yes / (No)
11. Thickness of immiscible layer N/A
12. Drive Gas (Air/Nitrogen) (AIR) NITROGEN / N/A

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
12:46	—	16.2	1518	63.3	6.18	20.27	5.70	11.62	
12:49	750	18.5	~~1468~~ 1468	93.4	2.43	29.70	5.32	11.58	
12:52	1500	19.1	1466	116.8	0.70	18.86	5.24	11.64	
12:55	2250	19.3	1469	139.7	0.20	14.68	5.21	11.69	
12:58	3000	19.4	1471	150.1	0.14	13.62	5.20	11.70	
13:01	3750	19.4	1471	158.1	0.07	2.54	5.19	11.70	
13:04	4500	19.3	1473	166.1	0.06	3.74	5.18	11.69	

1. Well evacuated to dryness? Yes / (No)
2. Sample Filtered? Yes / (No)
3. Sampling Equip. Used Geotech
4. Drive Gas (Air/Nitrogen) (AIR) /NITROGEN/ N/A
5. Sample Rate (mL/min) 250
6. Sample Appearance:
   Turbidity Clear
   Color Clear
   Odor None
7. Time to recharge (min): N/A
8. Sample Time: 13:05
9: Parameter/Container/Pres. **See Attached COC**
9. Other Information:

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

WILL NICHOLSON

Facility Name: **Gibbons Creek Station**		Sampler Name(s):	JONATHAN THOMPSON
MW Identification:	AP MW-4	Date/Time:	2/10/21 @ 15:00
Sample Number:	16	PID Readings:	N/A
Weather Conditions:	42° F FOG 10 NNW		
Wellhead Inspection:	NO COMMENT		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	13.52	7. Purge Rate (mL/min)	250
2. Intake Depth (±0.01 ft.)	48.0	7. Water Level Measuring Equip.	Geotech
3. Bottom of casing (±0.01 ft.)	52.81	8. Purge Equipment Used	Bladder
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: None	Turbidity: clear	12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: Clear			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
15:08	—	15.1	3859	247.6	4.39	3.50	5.74	13.71	
15:11	750	16.0	3874	214.7	4.28	3.62	5.79	13.86	
15:14	1500	17.2	3918	186.2	0.56	3.83	5.74	13.95	
15:17	2250	17.1	3926	173.2	0.16	1.80	5.74	14.04	
15:20	3000	16.7	3933	160.5	0.05	3.24	5.74	14.12	
15:23	3750	17.0	3913	152.1	0.01	1.97	5.74	14.22	
15:26	4500	17.1	3923	148.5	0.00	1.72	5.74	14.25	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	15:28
3. Sampling Equip. Used	Geotech	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR) /NITROGEN/ N/A		
5. Sample Rate (mL/min)			
6. Sample Appearance:			
Turbidity	Clear	9. Other Information:	
Color	Clear		
Odor	Slight Sulfer		

9109. Decontamination Procedures:
Alconox/DI Rinse

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

EQ-1 TAKEN HERE AT 16:00

Low Stress Groundwater Sampling Data Sheet

Will Nicholson

Facility Name: **Gibbons Creek Station**		Sampler Name(s):	Jonathan Thompson
MW Identification:	AP MW-5	Date/Time:	2-10-21 14:13
Sample Number:	15	PID Readings:	N/A
Weather Conditions:	42°F, Cloudy, 10 mph NNW		
Wellhead Inspection:	No Comment.		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	12.09	7. Purge Rate (mL/min)	250
2. Intake Depth (±0.01 ft.)	39	7. Water Level Measuring Equip.	Geotech
3. Bottom of casing (±0.01 ft.)	43.15	8. Purge Equipment Used	Bladder
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	NA
Odor: None Turbidity	Clear	12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: Clear			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
14:20	–	14.8	2060	383.4	5.48	1.60	3.42	12.34	
14:23	750	18.1	2310	332.4	3.07	6.51	3.73	18.35	
14:26	1500	18.9	2005	300.2	0.33	60.02	3.81	12.36	
14:29	2250	18.9	2257	294.3	0.18	70.60	3.79	12.39	
14:32	3000	19.1	3035	310.1	0.10	65.06	3.70	12.45	
14:35	3750	18.9	3152	310.5	0.07	66.70	3.69	12.43	
14:38	4500	18.8	3196	310.2	0.04	64.15	3.68	12.39	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	14:40
3. Sampling Equip. Used	BLADDER	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN/ N/A		
5. Sample Rate (mL/min)	250		
6. Sample Appearance:			
Turbidity	Cloudy	9. Other Information:	
Color	Clear		
Odor	None		

9109. Decontamination Procedures:
Alconox/DI Rinse

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

WILL NICHOLSON

Facility Name: **Gibbons Creek Station**	Sampler Name(s): JONATHAN THOMPSON
MW Identification: SFL MW-2	Date/Time: 2/9/21 14:15
Sample Number: 5	PID Readings: N/A
Weather Conditions: 51° F CLOUDY 9 MPH NNW	
Wellhead Inspection: NO COMMENT	

Visual Inspection:

1. Survey Mark Present: (Yes) / No
2. Collision/Vandalism Damage: Yes / (No)
3. Casing Degradation: Yes / (No)
4. Well Subsidence: Yes / (No)
5. Standing/Ponded Water: Yes / (No)
6. Frost Heaving: Yes / (No)
7. Lock in Place: (Yes) / No

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.]) 11.57
2. Intake Depth (±0.01 ft.) 20
3. Bottom of casing (±0.01 ft.) 23.84
4. Casing Diameter (inches) 2
5. Actual Volume of Water Purged (mL) 5250
6. Purge Water Characteristics:
   Odor None Turbidity Cloudy
   Color Clear
7. Purge Rate (mL/min) 250
7. Water Level Measuring Equip. GEOTECH
8. Purge Equipment Used PERISTALTIC
9. Dedicated? (Yes/No) Yes / (No)
10. Immiscible layer observed Yes / (No)
11. Thickness of immiscible layer N/A
12. Drive Gas (Air/Nitrogen) AIR / NITROGEN / (N/A)

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
1422	~	18.5	7239	273.4	1.91	73.45	6.58	12.3	Emptied FC
1431	2250	19.9	7284	234.9	0.50	33.49	6.58	13.24	
1434	3000	20.3	7302	231.4	0.37	16.24	6.56	13.49	
1437	3750	20.1	7307	228.6	0.30	11.01	6.56	13.62	
1440	4500	19.9	7319	226.1	0.24	7.71	6.55	13.74	
1443	5250	19.8	7329	224.0	0.19	5.54	6.55	13.85	
~~1446~~	~~6000~~								

1. Well evacuated to dryness? Yes / (No)
2. Sample Filtered? Yes / (No)
3. Sampling Equip. Used Geotech
4. Drive Gas (Air/Nitrogen) AIR /NITROGEN/(N/A)
5. Sample Rate (mL/min)
6. Sample Appearance:
   Turbidity CLEAR
   Color CLEAR
   Odor NONE
7. Time to recharge (min): N/A
8. Sample Time: 1445
9: Parameter/Container/Pres. **See Attached COC**
9. Other Information:

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**
Calibration Date: **LAB**
Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

WILL NICHOLSON

Facility Name: **Gibbons Creek Station**	Sampler Name(s): JONATHAN THOMPSON
MW Identification: SFL MW-3	Date/Time: 7/10/21 07:10
Sample Number: 8	PID Readings: N/A
Weather Conditions: 43° F FOG 8 MPH NNW	
Wellhead Inspection: NO COMMENT	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	18.12	7. Purge Rate (mL/min)	250
2. Intake Depth (±0.01 ft.)	25	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	28.22	8. Purge Equipment Used	~~Geotech~~ PERISTALTIC
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	NA
Odor: None Turbidity	Clear	12. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: Clear			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
07:17	—	18.3	5270	178.9	0.38	0.0	3.87	18.43	
07:20	750	18.8	5263	226.1	0.10	0.19	3.82	18.52	
07:23	1500	18.9	5267	278.2	0.03	0.36	3.81	18.54	
07:26	2250	19.1	5277	306.0	0.00	1.11	3.80	18.56	
07:29	3000	18.6	5271	321.4	0.01	1.64	3.79	18.57	
07:32	3750	18.9	5292	332.9	0.01	0.97	3.80	18.57	
07:35	4500	18.7	5292	335.6	0.00	1.01	3.79	18.57	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	07:40
3. Sampling Equip. Used	PERISTALTIC	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ N/A		
5. Sample Rate (mL/min)	250		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures:
Alconox/DI Rinse

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

WILL NICHOLSON

Facility Name: **Gibbons Creek Station**	Sampler Name(s): JONATHAN THOMPSON
MW Identification: SFL MW-4	Date/Time: 2/10/21 08:00
Sample Number: 9	PID Readings: N/A
Weather Conditions: 42° F FOG 8 MPH NW	
Wellhead Inspection: NO COMMENT	

Visual Inspection:

1. Survey Mark Present:	Yes / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	15.68	7. Purge Rate (mL/min)	250
2. Intake Depth (±0.01 ft.)	37	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	43.05	8. Purge Equipment Used	BLADDER
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: None Turbidity: Clear		12. Drive Gas (Air/Nitrogen)	(AIR) NITROGEN / N/A
Color: Clear			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
08:08	—	16.8	4773	221.0	6.51	2.24	6.37	16.18	
08:11	750	18.8	6152	62.5	0.88	9.69	6.47	16.6	
08:14	1500	18.7	6197	28.3	0.33	14.71	6.46	16.8	
08:17	2250	18.6	6289	4.3	0.13	2.44	6.45	16.89	
08:20	3000	18.5	6354	-16.5	0.04	0.00	6.45	16.95	
08:23	3750	18.6	6360	-27.3	0.01	0.00	6.45	16.98	
08:26	4500	18.6	6371	-31.8	0.01	0.34	6.45	16.98	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	08:30
3. Sampling Equip. Used	BLADDER	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR)/NITROGEN/ N/A		
5. Sample Rate (mL/min)	250		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	SLIGHT SULFUR		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

WILL NICHOLSON

Facility Name: **Gibbons Creek Station**		Sampler Name(s):	JONATHAN THOMPSON
MW Identification:	SFL MW-5	Date/Time:	2/9/21 13:25
Sample Number:	4	PID Readings:	N/A
Weather Conditions:	50° F CLOUDY 9 NNW		
Wellhead Inspection:	NO COMMENT		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	~~15.~~ Ho: 16.44	7. Purge Rate (mL/min)	250
2. Intake Depth (±0.01 ft.)	20	7. Water Level Measuring Equip.	Geotech
3. Bottom of casing (±0.01 ft.)	24.43	8. Purge Equipment Used	Peristaltic
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
S. Actual Volume of Water Purged (mL)	6000	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	NA
Odor: None Turbidity	Clear	12. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: Clear			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
13:30	—	19.7	8876	298.2	1.89	3.72	4.75	17.09	
13:33	750	21.3	8829	319.5	0.94	9.45	4.80	17.75	
13:36	1500	21.3	8811	327.7	0.91	11.01	4.78	18.20	
13:39	2250	21.3	8803	330.9	0.79	12.12	4.76	18.49	
1342	3000	21.2	8819	338.2	0.58	18.72	4.73	18.64	
1345	3750	21.3	8815	347.7	0.42	17.93	4.70	18.90	
1348	4500	21.4	8829	352.0	0.34	10.67	4.68	19.02	
1351	5280	21.4	8844	354.6	0.25	10.59	4.65	17.29	
1354	6000	21.4	8840	353.9	0.19	11.01	4.64	19.42	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	13:55
3. Sampling Equip. Used	Geotech	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)		
S. Sample Rate (mL/min)	250		
6. Sample Appearance:			
Turbidity	Clear	9. Other Information:	
Color	Clear		
Odor	None		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

FB-1 TAKEN HERE @ 13:45

Low Stress Groundwater Sampling Data Sheet

WILL NICHOLSON

Facility Name: **Gibbons Creek Station**	Sampler Name(s): JONATHAN THOMPSON
MW Identification: SPL MW1-6	Date/Time: 2/9/21 12:00
Sample Number: 3	PID Readings: N/A
Weather Conditions: 50° F CLOUDY 9 MPH NW.	
Wellhead Inspection: NO COMMENT	

Visual Inspection:

1. Survey Mark Present: (Yes) / No
2. Collision/Vandalism Damage: Yes / (No)
3. Casing Degradation: Yes / (No)
4. Well Subsidence: Yes / (No)
5. Standing/Ponded Water: Yes / (No)
6. Frost Heaving: Yes / (No)
7. Lock in Place: (Yes) / No

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.]) 18.59
2. Intake Depth (±0.01 ft.) 20
3. Bottom of casing (±0.01 ft.) 23.15
4. Casing Diameter (inches) 2
5. Actual Volume of Water Purged (mL) 5250
6. Purge Water Characteristics:
   - Odor: None
   - Color: Clear
   - Turbidity: Clear
7. Purge Rate (mL/min) 250
7. Water Level Measuring Equip. GEOTECH
8. Purge Equipment Used WTB Peristaltic
9. Dedicated? (Yes/No) Yes / (No)
10. Immiscible layer observed Yes / (No)
11. Thickness of immiscible layer NA
12. Drive Gas (Air/Nitrogen) AIR / NITROGEN / (N/A)

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
12:22	—	18.1	9998	184.2	1.74	12.25	4.02	18.98	
12:25	750	21.0	10446	360.2	0.62	1.39	3.80	19.53	
12:28	1500	21.3	10444	389.5	0.71	8.51	3.80	19.81	
12:31	2250	21.0	10479	422.3	0.61	8.16	3.80	20.10	
12:34	3000	21.5	10440	431.3	0.65	41.0	3.50	20.41	
12:37	3750	21.4	10461	433.9	0.70	43.0	3.81	20.75	
12:40	4500	20.7	10476	438.4	0.46	43.3	3.81	21.10	
12:43	5250	20.6	10492	435.5	0.25	41.5	3.82	21.59	

1. Well evacuated to dryness? (Yes) / No
2. Sample Filtered? Yes / (No)
3. Sampling Equip. Used PERISTALTIC
4. Drive Gas (Air/Nitrogen) AIR /NITROGEN/ (N/A)
5. Sample Rate (mL/min) 250
6. Sample Appearance:
   - Turbidity: CLOUDY
   - Color: SLIGHT TAN
   - Odor: NONE
7. Time to recharge (min): 1080
8. Sample Time: 12:45
9. Parameter/Container/Pres.: **See Attached COC**
9. Other Information:

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

WILL NICHOLSON

Facility Name: **Gibbons Creek Station**	Sampler Name(s): JONATHAN THOMPSON
MW Identification: SFL MW-7	Date/Time: 2/10/21 06:00
Sample Number: 7	PID Readings: N/A
Weather Conditions: 43° F FOG 9 MPH NW	
Wellhead Inspection: NO COMMENT	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	14.58	7. Purge Rate (mL/min)	250
2. Intake Depth (±0.01 ft.)	50	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	58.32	8. Purge Equipment Used	BLADDER
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	NA
Odor: None Turbidity	clear	12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: Clear			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
06:18	—	19.1	5564	~~70~~ 74.8	2.71	4.51	6.75	15.18	
06:21	750	19.5	5607	26.7	0.70	4.28	6.73	15.30	
06:24	1500	19.4	5606	-0.3	0.32	3.97	6.72	15.35	
06:27	2250	19.3	5652	-19.8	0.20	2.88	6.70	15.40	
06:30	3000	19.3	5671	-24.1	0.14	2.44	6.65	15.41	
06:33	3750	19.5	5678	-25.6	0.12	2.27	6.65	15.41	
06:36	4500	19.5	5680	-28.6	0.10	2.43	6.64	15.41	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	06:46
3. Sampling Equip. Used	Geotech	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR) /NITROGEN/ N/A		
5. Sample Rate (mL/min)	250		
6. Sample Appearance:			
Turbidity	Clear	9. Other Information:	
Color	Clear		
Odor	None		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Well became tight at 50 ft, so, set intake depth to 50.

Low Stress Groundwater Sampling Data Sheet

Facility Name: **Gibbons Creek Station**		Sampler Name(s): WILL NICHOLSON / JONATHAN THOMPSON	
MW Identification: SSP / AP MW-1		Date/Time: 7/9/2021	08:30
Sample Number: 1		PID Readings: N/A	
Weather Conditions: 49° F FOGGY 11 MPH NW			
Wellhead Inspection: SEE COMMENT			

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	8.34	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	40	7. Water Level Measuring Equip.	GROTECH
3. Bottom of casing (±0.01 ft.)	43.22	8. Purge Equipment Used	BLADDER
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	9900	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: NONE Turbidity: CLEAR		12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: CLEAR			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
08:55	-	20.3	7391	141.6	1.01	39.03	5.72	9.55	
08:58	900	20.0	7392	120.6	0.35	43.11	5.74	9.81	
09:01	1800	19.8	7387	105.7	0.18	81.31	5.76	10.08	
09:04	2700	19.9	7381	98.8	0.14	125.6	5.77	10.35	
09:07	3600	20.1	7388	94.0	0.07	190.1	5.77	10.54	EMPTIED FLOW CELL
09:10	4500	19.8	7391	86.3	0.08	195.3	5.76	11.23	
09:13	5400	19.9	7383	85.0	0.07	161.3	5.78	11.31	
09:16	6300	19.9	7384	83.5	0.06	179.1	5.77	11.36	
09:19	7200	19.9	7387	82.2	0.05	157.3	5.77	11.42	
09:22	8100	19.9	7387	73.9	0.04	151.1	5.76	11.45	
09:25	9000	19.9	7388	72.7	0.04	140.3	5.77	11.51	
09:28	9900	20.0	7389	71.1	0.04	141.7	5.77	11.60	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	09:30
3. Sampling Equip. Used	BLADDER	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	(AIR)/NITROGEN/ N/A		
5. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	CLOUDY	9. Other Information:	
Color	BROWN/TAN		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

WILL NICHOLSON

Facility Name: **Gibbons Creek Station**		Sampler Name(s):	JONATHAN THOMPSON
MW Identification:	SSP - MW2	Date/Time:	2/10/21 09:30
Sample Number:	10	PID Readings:	N/A
Weather Conditions:	41°F FOG 10 NNW		
Wellhead Inspection:	NO COMMENT		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	23.84	7. Purge Rate (mL/min)	250
2. Intake Depth (±0.01 ft.)	45.00	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	47.06	8. Purge Equipment Used	BLADDER
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: None Turbidity: Clear		12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: Clear			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
09:33	–	14.8	6895	125.9	6.44	3.22	4.51	24.20	
09:38	750	17.6	7051	228.4	1.32	4.62	4.06	25.12	
09:41	1500	17.9	7089	249.8	0.63	5.41	4.03	25.48	
09:44	2250	18.2	7099	275.2	0.28	6.11	4.02	25.99	
09:47	3000	18.3	7093	304.1	0.19	6.92	4.01	26.50	
09:50	3750	18.4	7094	324.5	0.16	4.77	4.00	26.85	
09:53	4500	18.3	7095	341.5	0.13	4.11	4.00	27.20	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	09:55
3. Sampling Equip. Used	Geotech	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR)/NITROGEN/ N/A		
5. Sample Rate (mL/min)	250		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Will NICHOLSON

Facility Name: **Gibbons Creek Station**	Sampler Name(s): Jonathan Thompson
MW Identification: SSP MW-3	Date/Time: 2-9-21 10:23
Sample Number: 11	PID Readings: N/A
Weather Conditions: 39°F, Fog, Slight N	
Wellhead Inspection: NO COMMENT	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / No		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	28.18	7. Purge Rate (mL/min)	250
2. Intake Depth (±0.01 ft.)	43.00	7. Water Level Measuring Equip.	Geotech
3. Bottom of casing (±0.01 ft.)	48.36	8. Purge Equipment Used	Bladder
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	NA
Odor: None	Turbidity: Clear	12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: Clear			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
10:35	—	14.6	6359	278.1	5.77	0.00	4.54	28.59	
10:38	750	16.7	6516	287.6	0.79	0.19	4.37	28.81	
10:41	1500	16.8	6512	298.9 ~~290.5~~	0.37	2.40	4.33	28.82	
10:44	2250	17.4	6588	297.4	0.24	6.95	4.31	28.95	
10:47	3000	17.5	6676	298.9	0.13	13.01	4.30	28.99	
10:50	3750	17.7	6690	300.0	0.10	4.25	4.30	29.05	
10:53	4500	17.5	6757	301.3	0.06	6.50	4.29	29.10	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	10:55
3. Sampling Equip. Used	BLADDER	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR)/NITROGEN/ N/A		
5. Sample Rate (mL/min)	250		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Casing shift about 4ft down. Able to pull casing to drop pump.

FB-2 TAKEN HERE AT 10:55

Low Stress Groundwater Sampling Data Sheet

Will Nicholson

Facility Name: **Gibbons Creek Station**		Sampler Name(s):	Jonathan Thompson
MW Identification:	SSP MW-4	Date/Time:	2/10/21 11:25
Sample Number:	12	PID Readings:	N/A
Weather Conditions:	40°F, Cloudy, 13mph N		
Wellhead Inspection:	NO COMMENT		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	24.65	7. Purge Rate (mL/min)	250
2. Intake Depth (±0.01 ft.)	45.00	7. Water Level Measuring Equip.	Geotech
3. Bottom of casing (±0.01 ft.)	51.58	8. Purge Equipment Used	Bladder
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: None	Turbidity: Clear	12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: Clear			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
11:38	-	14.5	3109	92.1	3.86	38.66	12.82	24.51	
11:41	750	17.7	4413	78.0	1.02	1.89	6.65	25.05	
11:44	1500	17.8	4441	53.7	0.53	2.32	6.53	25.50	
11:47	2250	18.6	4427	41.0	0.39	3.45	6.56	25.99	
11:50	3000	18.4	4405	33.9	0.31	4.33	6.57	26.49	
11:53	3750	18.5	4356	26.9	0.26	5.18	6.60	27.03	
11:56	4500	18.4	4313	18.5	0.22	7.07	6.63	27.47	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	12:00
3. Sampling Equip. Used	Geotech	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR)/NITROGEN/ N/A		
5. Sample Rate (mL/min)	250		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

WILL NICHOLSON

Facility Name: **Gibbons Creek Station**	Sampler Name(s): JONATHAN THOMPSON
MW Identification: MNW-1S	Date/Time: 2/9/21 15:30
Sample Number: 6	PID Readings: N/A
Weather Conditions: 52° F CLOUDY 8 MPH N	
Wellhead Inspection: NO COMMENT	

Visual Inspection:

1. Survey Mark Present: (Yes) / No
2. Collision/Vandalism Damage: Yes / (No)
3. Casing Degradation: Yes / (No)
4. Well Subsidence: Yes / (No)
5. Standing/Ponded Water: Yes / (No)
6. Frost Heaving: Yes / (No)
7. Lock in Place: (Yes) / No

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.]): 6.22
2. Intake Depth (±0.01 ft.): 24
3. Bottom of casing (±0.01 ft.): 27.25
4. Casing Diameter (inches): 2
5. Actual Volume of Water Purged (mL): 4500
6. Purge Water Characteristics:
   - Odor: None
   - Color: Clear
   - Turbidity: Clear
7. Purge Rate (mL/min): 250
7. Water Level Measuring Equip.: GEOTECH
8. Purge Equipment Used: PERISTALTIC
9. Dedicated? (Yes/No): Yes / (No)
10. Immiscible layer observed: Yes / (No)
11. Thickness of immiscible layer: N/A
12. Drive Gas (Air/Nitrogen): AIR / NITROGEN / (N/A)

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
15:36	-	19.9	3484	171.1	6.67	6.21	3.57	6.68	
15:39	750	21.8	3394	450.5	5.85	19.98	3.45	6.80	
15:42	1500	22.0	3391	454.6	5.80	10.14	3.43	6.82	
15:45	2250	22.2	3387	377.0	1.97	4.47	3.64	6.83	
15:48	3000	22.1	3398	340.1	0.56	3.98	3.64	6.83	
15:51	3750	22.1	3401	327.7	0.28	4.24	3.65	6.83	
15:54	4500	22.0	3403	329.6	0.51	7.03	3.63	6.83	

1. Well evacuated to dryness? Yes / (No)
2. Sample Filtered? Yes / (No)
3. Sampling Equip. Used: Geotech
4. Drive Gas (Air/Nitrogen): AIR / NITROGEN / (N/A)
5. Sample Rate (mL/min): 250
6. Sample Appearance:
   - Turbidity: CLEAR
   - Color: CLEAR
   - Odor: NONE
7. Time to recharge (min): N/A
8. Sample Time: 15:55
9: Parameter/Container/Pres.: **See Attached COC**
9. Other Information:

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

DUP-1 TAKEN HERE @ "18:10"

Low Stress Groundwater Sampling Data Sheet

JONATHAN THOMPSON

Facility Name: **Gibbons Creek Station**	Sampler Name(s): WILL NICHOLSON
MW Identification: MNW-18	Date/Time: 2/9/2021 10:20
Sample Number: 2	PID Readings: N/A
Weather Conditions: 49°F, Fog, 8 mph NW	
Wellhead Inspection: NO COMMENT	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	S. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	8.35	7. Purge Rate (mL/min)	250
2. Intake Depth (±0.01 ft.)	45	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	51.5	8. Purge Equipment Used	BLADDER
4. Casing Diameter (inches)	4	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	5250	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: None Turbidity	Clear	12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: Clear			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
10:32	—	18.3	2094	51.7	6.24	2.83	7.09	8.09	
10:35	750	18.9	2561	21.4	4.12	0.21	6.90	8.16	
10:38	1500	18.5	3088	-8.0	1.22	0.20	6.79	8.30	
10:41	2250	18.4	3118	-23.2	0.45	0.08	6.78	8.40	
10:44	3000	18.4	3117	-30.1	0.31	0.00	6.77	8.52	
10:47	3750	18.5	3118	-36.4	0.24	0.00	6.77	8.66	
10:50	4500	18.5	3119	-40.4	0.20	0.00	6.77	8.84	
10:53	5250	18.6	3119	-43.2	0.17	0.00	6.77	8.89	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	(Yes) / No	8. Sample Time:	10:55
3. Sampling Equip. Used	BLADDER	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR)/NITROGEN/ N/A		
S. Sample Rate (mL/min)	250		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Calibrated at Geotech's Texas service center
1600 North I 35E Suite 114
Carrollton, TX 75006
(800) 276-5325 *Fax:* (972) 245-8889

YSI Pro DSS Calibration Certificate

Unit Number: 6516
Serial Number: 18K101016

Calibration Date 2/5/2021
Technician: Robert Winkelman

Installed Probes
- ☑ Conductivity
- ☑ PH/ORP
- ☑ DO
- ☑ TURB

- ☑ Display is clear, and free of damage
- ☑ Cable and accessories are free of damage
- ☑ Firmware version is up to date.

Display Battery 95 % **Pass**
Cable Flex Test: **Pass**

Cable Length	10M	pH/ORP Serial #	19B102488
Cable Lot #	18L04693	DO Probe Serial #	19B12881
Cond Probe Lot #	19A102581	Turb Probe Serial #	18K100703
Bath Temp	19.1 °C		
Meter Temp	19.3 °C		
Variance	0.20	**Pass**	

Cond

Calibration	Reading		Buffer Lot #	Exp. Date	
1.413 mS	1.413 mS	**Pass**	0GI224	9/21	**Pass**

pH

Point Test	Calibration	Reading	mV	Slope		Buffer Lot #	Exp. Date	
2 Point	pH 7.00	pH 7.00	-13.4 mV			9GL1006	12/21	**Pass**
	pH 4.00	pH 4.00	151.6 mV	165	**Pass**	0GJ387	10/22	**Pass**

ORP

Calibraition	Reading		Buffer Lot #	Exp. Date	
220 mV	220 mV	**Pass**	0GI319	6/21	**Pass**

Turbidity

Zero	Reading	Variance		Cal	Reading	Variance		Buffer Lot #	Exp. Date	
0 ntu	.04 ntu	0.04 ntu	**Pass**	124 ntu	124.22	0.2%	**Pass**	20H20320032	8/21	**Pass**

DO

Barometer	Calibration	Reading	Variance		Test Fluid
748.6 mmHg	98.5 %	98.4 %	-0.1%	**Pass**	Water Saturated Air

Time:	Min.	Sec.	Reading		Nitrogen Lot #
	1	28	.01 %	**Pass**	20-301-N2

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as specified by the manufacturer and was calibrated in accordance to manufacturer specifications. All calibration standards used are NIST traceable. With the provided lot numbers we can provide NIST documents on request. Call us at (800) 833-7958 and we will be glad to help.

July 2021

Gibbons Creek Steam Electric Station
Site Water Levels

HDR

Sampler: WN | JT **Date:** 7/2/21 - 7/3/21

Equipment: GEOTECH 160 **Decontamination:** Alconox with DI Rinse

Well	Water Level below TOC	Bottom of Casing	Prevoius Water Level Below TOC (02/10/2021)	Prevoius Water Level Below TOC (06/24/2019)	Notes
AP PZ-1	5.36	-	6.64	6.39	
AP PZ-2	17.07	-	20.46	17.19	
AP PZ-3	4.76	-	6	4.59	
AP PZ-4	14.03	-	10.35	9.54	
AP MW-1	13.03	-	13.22	12.47	
AP MW-1D	14.48	-	14.83	14.14	
AP MW-2	12.65	-	7.51	6.88	
AP MW-3	12.59	-	11.39	10.64	
AP MW-4	14.09	-	13.52	13.1	
AP MW-5	14.47	-	12.09	11.27	
AP MW-6	17.03	-	16.64	16.19	
SSP/SP MW-1	7.71	-	8.34	7.32	
SSP MW-1	13.95	-	15.86	14.36	
SSP MW-2	23.02	-	23.84	21.18	
SSP MW-3	27.12	-	28.18	26.35	
SSP MW-4	24.48	-	24.65	23.87	
SFL MW-1	-	-	22.5	20.63	
SFL MW-2	10.38	-	11.57	10.11	
SFL MW-3	17.42	-	18.12	16.39	
SFL MW-4	14.78	-	15.68	14.21	
SFL MW-5	16.00	-	16.44	15.03	
SFL MW-6	19.00	-	18.59	17.31	
SFL MW-7	13.22	-	14.58	13.17	
MNW-11	20.70	-	20.27	20.87	
MNW-15	4.88	-	6.22	4.02	
MNW-16	12.50	-	14.12	12.49	
MNW-17	29.36	-	33.5	43.85	
MNW-18	8.70	-	8.35	8.37	

Low Stress Groundwater Sampling Data Sheet

Facility Name: **Gibbons Creek Station**		Sampler Name(s): WILL NICHOLSON / JOHNATHAN NIXON
MW Identification: SSP AP GW MW-1		Date/Time: 7/12/2021 11:45
Sample Number: (		PID Readings: N/A
Weather Conditions: 81°F 7 MPH S RAIN		
Wellhead Inspection: NO COMMENT		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	7.71	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	43.00	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)		8. Purge Equipment Used	BLADDER
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: NONE Turbidity: VERY MURKY		12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: BROWN			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
12:15	—	22.2	8896	-92.6	0.10	205.92	5.83	9.90	
12:18	900	22.1	8892	-100.9	0.03	156.72	5.77	10.47	
12:21	1800	22.2	8881	-101.5	0.00	145.43	5.69	10.69	
12:24	2700	22.0	8877	-101.1	0.00	146.39	5.65	11.38	
12:27	3600	22.0	8911	-99.9	0.00	134.31	5.62	11.61	
12:30	4500	22.0	8918	-100.3	0.00	170.11	5.60	11.91	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	12:35
3. Sampling Equip. Used	BLADDER	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN/ N/A		
5. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	CLOUDY	9. Other Information:	
Color	LIGHT BROWN		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **Gibbons Creek Station**		Sampler Name(s):	WN / JT
MW Identification:	SSP MW-2	Date/Time:	7/13/2021 0905
Sample Number:	8	PID Readings: N/A	
Weather Conditions:	76° F CALM / MOSTLY SUNNY		
Wellhead Inspection:	PAD MOVEMENT / LOOSE HOUSING		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	23.02	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	40	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	-	8. Purge Equipment Used	BLADDER
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: NONE Turbidity	CLEAR	12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: CLEAR			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
0915	-	24.7	9308	236.1	4.16	10.10	4.02	23.23	
0918	900	23.4	9501	240.7	2.22	12.58	4.55	24.01	
0921	1800	23.3	9513	253.1	0.26	11.73	4.50	24.65	
0924	2700	23.3	9503	264.4	0.25	11.91	4.50	25.16	
0927	3600	23.3	9564	274.4	0.20	11.96	4.52	25.54	
0930	4500	23.3	9564	277.9	0.23	11.89	4.52	25.88	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	0935
3. Sampling Equip. Used	N/A	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR)/NITROGEN/ N/A		
5. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

HDR	Facility Name: **Gibbons Creek Station**	Sampler Name(s):	WNS / ST
	MW Identification: SSP MW-3	Date/Time:	7/13/2021 0820
	Sample Number: 7	PID Readings:	N/A
	Weather Conditions:	74° F CALM MOSTLY SUNNY	
	Wellhead Inspection:	NO COMMENT	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	27.12	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	40	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	-	8. Purge Equipment Used	BLADDER
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: NONE Turbidity	CLEAR	12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: CLEAR			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
0827	-	24.1	7906	154.9	2.59	9.69	4.79	27.61	
0830	900	23.4	8060	190.2	0.24	12.75	4.49	28.03	
0833	1800	23.4	8088	211.2	0.14	20.82	4.38	28.48	
0836	2700	23.3	8126	237.0	0.08	2.38	4.25	28.62	
0839	3600	23.2	8147	258.0	0.04	2.97	4.19	28.72	
0842	4500	23.3	8264	274.4	0.03	2.87	4.18	28.92	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	0845
3. Sampling Equip. Used	N/A BLADDER	Parameter/Container/Pres.	
4. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN/ N/A	See Attached COC	
5. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures:
Alconox/DI Rinse

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **Gibbons Creek Station**	Sampler Name(s): LWN/ST
MW Identification: ~~AP MW-4~~ SSP MW-4	Date/Time: 7/13/2021 0730
Sample Number: 6	PID Readings: N/A
Weather Conditions: 72° F CALM PARTLY CLOUDY	
Wellhead Inspection: NO COMMENT	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	S. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	24.48	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	45	7. Water Level Measuring Equip.	ROSOTECH
3. Bottom of casing (±0.01 ft.)	—	8. Purge Equipment Used	BLADDER
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: NONE Turbidity	NONE	12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: CLEAR			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
0738	—	23.2	4739	-67.2	5.71	6.58	11.90	24.31	
0741	900	23.1	4718	-112.5	0.63	2.49	11.89	25.10	
0744	1800	23.2	4702	-121.8	0.37	2.35	11.92	25.95	
0747	2700	23.1	4868	-123.7	0.38	2.50	11.92	26.33	
0750	3600	23.2	4879	-124.1	0.42	2.45	11.94	27.10	
0753 ~~7553~~	4500	23.2	4917	-122.7	0.63	2.79	11.96	27.54	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	0755
3. Sampling Equip. Used	BLADDER	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR)/NITROGEN/ N/A		
S. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	LOW	9. Other Information:	
Color	NONE		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **Gibbons Creek Station**		Sampler Name(s):	LSN/JT
MW Identification:	AP MW-1D	Date/Time:	7/12/2021 14:20
Sample Number:	3	PID Readings:	N/A
Weather Conditions:	76° F RAIN 8 MPH N		
Wellhead Inspection:	NO COMMENT		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	14.48	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	35	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	-	8. Purge Equipment Used	BLADDER
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: NONE Turbidity	NONE	12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: CLEAR			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
1440	-	22.4	1594	111.6	4.91	8.97	6.12	14.75	
1443	900	22.2	1594	111.1	0.51	5.05	5.98	14.75	
1446	1800	22.3	1601	109.5	0.16	4.59	5.95	14.75	
1449	2700	22.3	1604	108.9	0.12	4.55	5.94	14.75	
1452	3600	22.3	1613	106.7	0.04	4.29	5.91	14.75	
1455	4500	22.3	1613	106.5	0.03	3.96	5.91	14.75	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	~~1600~~ 1500
3. Sampling Equip. Used	BLADDER	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR)/NITROGEN/ N/A		
5. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **Gibbons Creek Station**		Sampler Name(s):	WN / JT
MW Identification:	AP MW-3	Date/Time:	7/12/21 13:20
Sample Number:	2	PID Readings:	N/A
Weather Conditions:	74° F RAIN 9 MPH N		
Wellhead Inspection:	NO COMMENT		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	12.59	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	38.0	7. Water Level Measuring Equip.	GROTECH
3. Bottom of casing (±0.01 ft.)	"	8. Purge Equipment Used	BLADDER
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: NONE Turbidity	NONE	12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: CLEAR			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
1331	—	22.0	1929	28.3	2.26	63.50	5.13	12.95	
1334	900	22.0	1790	50.7	0.64	23.20	5.04	13.02	
1337	1800	22.1	1790	58.9	0.58	32.50	5.03	13.25	
1340	2700	22.1	1791	65.1	0.51	44.83	5.02	13.25	
1343	3600	22.1	1802	75.6	0.42	8.53	4.97	13.28	
1346	4500	22.2	1827	88.6	0.21	8.47	4.96	13.30	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	1350
3. Sampling Equip. Used	BLADDER	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR)/NITROGEN/ N/A		
5. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	NONE	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

DUP-1 TAKEN @ 17:35

Low Stress Groundwater Sampling Data Sheet

Facility Name: **Gibbons Creek Station**		Sampler Name(s):	WN / JT
MW Identification:	AP MW-4	Date/Time:	7/13/2021 0630
Sample Number:	5	PID Readings:	N/A
Weather Conditions:	71° F CALM MOSTLY SUNNY		
Wellhead Inspection:	NO COMMENT		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	14.69	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	45	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	-	8. Purge Equipment Used	BLADDER
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: NONE Turbidity	CLEAR	12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: CLEAR			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
0640	-	21.3	46960	223.9	2.95	4.46	5.55	14.89	
0643	900	21.1	4725	192.9	1.52	6.01	5.52	14.92	
0646	1800	21.2	4739	167.6	0.52	4.44	5.50	14.98	
0649	2700	21.2	4738	155.3	0.27	10.61	5.49	15.00	
0652	3600	21.2	4748	141.2	0.27	8.61	5.48	15.02	
0655	4500	21.3	4743	135.7	0.19	7.26	5.48	15.03	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	0700
3. Sampling Equip. Used	BLADDER	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR)/NITROGEN/ N/A		
5. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	NONE		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

FB-1 TAKEN HERE @ 0700

Low Stress Groundwater Sampling Data Sheet

Facility Name: **Gibbons Creek Station**		Sampler Name(s):	WN / JT
MW Identification:	AP MW-5	Date/Time:	7/12/2021 15:25
Sample Number:	4	PID Readings:	N/A
Weather Conditions:	74° F CLOUDY 9 MPH N		
Wellhead Inspection:	NO COMMENT		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	14.47	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	35	7. Water Level Measuring Equip.	BLADDER GEOTECH
3. Bottom of casing (±0.01 ft.)	-	8. Purge Equipment Used	
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: NONE Turbidity: NONE		12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: CLEAR			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
1537	-	22.2	2536	471.3	6.87	14.42	3.25	14.67	
1540	900	21.8	2572	521.7	4.89	3.91	3.15	14.81	
1543	1800	21.9	2573	527.8	4.82	2.31	3.14	14.85	
1546	2700	21.9	2576	529.8	4.80	3.09	3.13	14.91	
1549	3600	21.9	2578	550.7	4.79	3.51	3.13	14.94	
1552	4500	22.0	3901	457.8	2.80	21.11	3.22	14.89	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	1550
3. Sampling Equip. Used	BLADDER	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN/ N/A		
5. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	SLIGHTLY CLOUDY	9. Other Information:	
Color	SLIGHTLY BROWN		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

HDR	Facility Name: **Gibbons Creek Station**	Sampler Name(s):	WN/JT
	MW Identification: SFL MW-2	Date/Time:	7/13/2021 1520
	Sample Number: 15	PID Readings:	N/A
	Weather Conditions:	92°F CALM SUNNY	
	Wellhead Inspection:	NO COMMENT	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	10.38	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	21	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	-	8. Purge Equipment Used	PERISTALTIC
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: NONE Turbidity: MEDIUM		12. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: LIGHT BROWN			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
1522	-	25.2	11576	311.1	1.78	237.40	5.64	10.89	
1525	900	23.8	11367	298.4	0.79	139.31	5.62	11.45	
1528	1800	23.6	11334	285.7	0.65	56.23	5.67	11.79	
1531	2700	24.0	11285	276.6	0.47	25.92	5.70	12.08	
1534	3600	23.7	11302	269.9	0.33	12.03	5.74	12.26	
1537	4500	23.9	11333	266.7	0.33	9.98	5.74	12.40	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	1540
3. Sampling Equip. Used	PERISTALTIC	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		
5. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **Gibbons Creek Station**		Sampler Name(s):	WN/JT
MW Identification:	SFL MW-3	Date/Time:	7/13/2021 1215
Sample Number:	11	PID Readings:	N/A
Weather Conditions:	86°F CALM SUNNY		
Wellhead Inspection:	NO COMMENT		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	7.92	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	15	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	28.22	8. Purge Equipment Used	PERISTALTIC
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: NONE Turbidity	CLEAR	12. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: CLEAR			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
1225	-	24.4	6324	334.8	0.29	9.61	3.79	18.32	
1228	900	24.3	6314	404.2	0.11	7.04	3.73	18.37	
1231	1800	24.3	6306	404.1	0.04	11.04	3.71	18.41	
1234	2700	24.4	6304	403.2	0.01	10.96	3.71	18.44	
1237	3600	24.3	6318	405.5	0.00	8.14	3.71	18.55	
1240	4500	24.2	6323	402.0	0.00	4.04	3.70	18.47	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	1245
3. Sampling Equip. Used	PERISTALTIC	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		
5. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **Gibbons Creek Station**		Sampler Name(s):	WN / JT
MW Identification:	SFL MW-4	Date/Time:	7/13/2021 1120
Sample Number:	10	PID Readings:	N/A
Weather Conditions:	85° F CALM MOSTLY CLOUDY		
Wellhead Inspection:	NO COMMENT		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	14.78	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	35	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	–	8. Purge Equipment Used	BLADDER
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: NONE Turbidity	CLEAR	12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: CLEAR			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
1126	–	24.0	6378	-8.0	1.98	12.45	6.26	15.28	
1129	900	23.5	6520	-31.8	0.17	7.33	6.16	15.89	
1132	1800	23.4	7104	-31.7	0.09	3.52	6.15	16.21	
1135	2700	23.3	7307	-34.0	0.03	2.70	6.14	16.32	
1138	3600	23.4	7556	-35.2	0.00	2.67	6.15	16.38	
1141	4500	23.6	7630	-35.7	0.00	3.11	6.12	16.44	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	1145
3. Sampling Equip. Used	BLADDER	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN/ N/A		
5. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **Gibbons Creek Station**	Sampler Name(s): WN/JT
MW Identification: SFL MW-5	Date/Time: 7/13/2021 1600-1555
Sample Number: 16	PID Readings: N/A
Weather Conditions: 94° F CALM SUNNY	
Wellhead Inspection: NO COMMENT	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	S. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	~16* ~16.08	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	22	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	-	8. Purge Equipment Used	PERISTALTIC
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
S. Actual Volume of Water Purged (mL)	3600	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor NONE Turbidity	CLEAR	12. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color CLEAR			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
1550	-	25.4	10073	287.4	0.99	7.65	4.41	16.35	
1559	900	23.6	10916	380.9	0.07	5.01	4.28	16.64	
1602	1800	23.2	10870	390.1	0.00	6.09	4.25	17.12	
1605	2700	23.3	10846	399.4	0.00	13.05	4.25	17.47	
1609	3600	23.3	10864	400.4	0.00	4.88	4.24	17.75	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	1610
3. Sampling Equip. Used	PERISTALTIC	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)		
S. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

* WATER LEVEL NOT RECORDED PRIOR TO PURGING

Low Stress Groundwater Sampling Data Sheet

HDR	Facility Name: **Gibbons Creek Station**	Sampler Name(s):	WN/JT
	MW Identification: SFL MW-7	Date/Time:	7/13/2021 1300
	Sample Number: 12	PID Readings:	N/A
	Weather Conditions:	88°F CALM PARTLY CLOUDY	
	Wellhead Inspection:	NO COMMENT	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	13.22	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	45.00	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	-	8. Purge Equipment Used	BLADDER
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: NONE Turbidity	CLEAR	12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: CLEAR			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
1309	-	25.1	6592	52.5	5.92	3.19	7.15	13.60	
1312	900	24.0	6627	-20.2	1.89	2.81	6.84	14.08	
1315	1800	23.9	6692	-36.2	1.02	2.39	6.63	14.26	
1318	2700	23.7	6909	-30.0	0.51	2.05	6.41	14.34	
1321	3600	23.8	6951	-12.4	0.37	2.26	6.34	14.43	
1324	4500	23.9	6956	-9.9	0.27	2.26	6.34	14.46	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	1330
3. Sampling Equip. Used	BLADDER	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR) NITROGEN/ N/A		
5. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

EQ-1 TAKEN HERE @ 1335

Low Stress Groundwater Sampling Data Sheet

Facility Name: **Gibbons Creek Station**		Sampler Name(s):	WN / JT
MW Identification:	SFL MW-6	Date/Time:	7/13/2021 1440
Sample Number:	14	PID Readings:	N/A
Weather Conditions:	89°F CALM SUNNY		
Wellhead Inspection:	NO COMMENT		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	S. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	19.00	7. Purge Rate (mL/min)	~~100~~ 200
2. Intake Depth (±0.01 ft.)	22	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	-	8. Purge Equipment Used	PERISTALTIC
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
S. Actual Volume of Water Purged (mL)	2400	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: NONE Turbidity	CLEAR	12. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: CLEAR			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
1445	-	26.16	12578	361.8	0.94	9.85	3.86	19.19	
1448	600	25.8	12644	444.3	0.28	2.29	3.76	19.54	
1451	1200	25.3	12625	457.0	0.23	2.19	3.76	19.83	
1454	1800	25.16	12600	461.5	0.30	3.57	3.76	20.08	
1457	2400	25.5	12607	454.5	0.30	4.54	3.76	20.39	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	1500
3. Sampling Equip. Used	PERISTALTIC	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)		
S. Sample Rate (mL/min)	200		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

HDR	Facility Name: **Gibbons Creek Station**	Sampler Name(s):	WN/JT
	MW Identification: MNW-15	Date/Time:	7/13/2021 1400
	Sample Number: 13	PID Readings:	N/A
	Weather Conditions:	89° F CALM SUNNY	
	Wellhead Inspection:	~~NO CONCERNS~~	TERMITE/ANT INFESTATION

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	4.88	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	25	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	-	8. Purge Equipment Used	PERISTALTIC
4. Casing Diameter (inches)	2	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: NONE Turbidity	CLEAR	12. Drive Gas (Air/Nitrogen)	AIR / NITROGEN (N/A)
Color: CLEAR			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
1403	-	26.1	4174	186.9	0.75	7.10	3.85	5.40	
1406	900	24.6	4066	301.9	0.06	13.31	3.59	5.56	
1409	1800	24.5	4089	302.4	0.00	14.56	3.58	5.59	
1412	2700	24.6	4090	297.3	0.00	13.97	3.57	5.60	
1415	3600	24.4	4092	295.1	0.00	13.74	3.57	5.58	
1418	4500	24.3	4097	297.2	0.00	11.89	3.57	5.58	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	1420
3. Sampling Equip. Used	PERISTALTIC	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR) NITROGEN/ N/A		
5. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

FB-2 TAKEN HERE @ 17:30

Low Stress Groundwater Sampling Data Sheet

HDR	Facility Name: **Gibbons Creek Station**	Sampler Name(s):	WN / JT
	MW Identification: MNW - 18	Date/Time:	7/13/2021
	Sample Number: 9	PID Readings: N/A	
	Weather Conditions: 78° F CALM MOSTLY SUNNY		
	Wellhead Inspection: NO COMMENT		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	8.70	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	45	7. Water Level Measuring Equip.	GEOTECH
3. Bottom of casing (±0.01 ft.)	-	8. Purge Equipment Used	BLADDER
4. Casing Diameter (inches)	2"	9. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	10. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		11. Thickness of immiscible layer	N/A
Odor: NONE Turbidity	CLEAR	12. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN / N/A
Color: CLEAR			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
1030	-	23.9	3106	26.1	5.02	2.80	6.82	8.40	
1033	900	23.3	3802	-1.0	3.00	2.15	6.75	8.61	
1036	1800	23.1	3958	-30.0	0.45	2.28	6.72	8.84	
1039	2700	23.3	3950	-39.2	0.22	2.06	6.71	9.01	
1042	3600	23.3	3928	-45.7	0.14	2.02	6.69	9.42	
1045	4500	23.5	3913	-47.4	0.11	2.10	6.69	9.56	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	1050
3. Sampling Equip. Used	BLADDER	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	(AIR) / NITROGEN/ N/A		
5. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	CLEAR	9. Other Information:	
Color	CLEAR		
Odor	NONE		

9109. Decontamination Procedures: **Alconox/DI Rinse**

11. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Calibrated at Geotech's Texas service center
1600 North I 35E Suite 114
Carrollton, TX 75006
(800) 276-5325 *Fax:* (972) 245-8889

YSI Pro DSS Calibration Certificate

Unit Number: 7127
Serial Number: 20F161183

Calibration Date 6/29/2021
Technician: Taylor Benton

Installed Probes
- ☑ Conductivity
- ☑ PH/ORP
- ☑ DO
- ☑ TURB

- ☑ Display is clear, and free of damage
- ☑ Cable and accessories are free of damage
- ☑ Firmware version is up to date.

Display Battery 95 % **Pass**
Cable Flex Test: **Pass**

Cable Length	10M	pH/ORP Serial #	20J104455
Cable Lot #	20j101927	DO Probe Serial #	19E103060
Cond Probe Lot #	20J104225	Turb Probe Serial #	20H103765
Bath Temp	23.36 °C		
Meter Temp	23.3 °C		
Variance	-0.06	**Pass**	

Cond

Calibration	Reading		Buffer Lot #	Exp. Date	
1.413 mS	1.413 mS	**Pass**	0gi224	7/21	**Pass**

pH

Point Test	Calibration	Reading	mV	Slope		Buffer Lot #	Exp. Date	
2 Point	pH 7.00	pH 7.00	-36.8 mV			1GD151	4/23	**Pass**
	pH 4.00	pH 4.00	136.7 mV	173.5	**Pass**	8FH171	12/21	**Pass**

ORP

Calibraition	Reading		Buffer Lot #	Exp. Date	
220 mV	220 mV	**Pass**	0GL190	9/21	**Pass**

Turbidity

Zero	Reading	Variance		Cal	Reading	Variance		Buffer Lot #	Exp. Date	
0 ntu	0 ntu	0 ntu	**Pass**	124 ntu	124 ntu	0.0%	**Pass**	18L18438971	8/21	**Pass**

DO

Barometer	Calibration	Reading	Variance		Test Fluid
750 mmHg	98.7 %	98.9 %	0.2%	**Pass**	Water Saturated Air

Time:	Min.	Sec.	Reading		Nitrogen Lot #
	5	0	0 %	**Pass**	1001003

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as specified by the manufacturer and was calibrated in accordance to manufacturer specifications. All calibration standards used are NIST traceable. With the provided lot numbers we can provide NIST documents on request. Call us at (800) 833-7958 and we will be glad to help.

Appendix C

Lab Results Summary Tables

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			Sample Location:	MNW-18															
			Compliance Phase:	Background								Initial A.M.		Assessment Monitoring					
			Sample Dates:	5/3/2017	5/30/2017	6/13/2017	6/27/2017	7/19/2017	8/23/2017	8/31/2017	9/7/2017	3/20/2018	6/8/2018	6/26/2019	1/16/2019	12/17/2019	6/16/2020	2/9/2021	7/13/2021
Constituent	Unit	MCL	Site BTV																
Field Parameters																			
pH	su	-	-	-	-	-	-	-	-	-	-	6.9	6.75	6.6	6.94	6.95	6.41	6.77	6.69
Conductivity	µS/cm	-	-	-	-	-	-	-	-	-	-	4,920	4,970	1,970	4,980	2,070	4,060	3,119	3,913
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	0	5.4	3.5	0.5	0	0	0.00	2.10
Dissolved Oxygen	mg/L	-	-	-	-	-	-	-	-	-	-	0	0.8	3.85	4.04	0	0.46	0.17	0.11
Temperature	°C	-	-	-	-	-	-	-	-	-	-	19	26.16	26.8	17.66	19.51	23.45	18.6	23.5
Oxidation Reduction Potential	mV	-	-	-	-	-	-	-	-	-	-	-96	-90	26	-92	-24	-51	-43.2	-47.4
Appendix III																			
Boron	mg/L	N/A	0.621	0.45	0.44	0.44	0.43	0.44	0.54	0.44	0.3	-	ND	0.297	ND	-	0.485	0.422	0.0451J
Calcium	mg/L	N/A	542	301	330	350	394	440	447	444	439	-	396	104.0	316.0	-	322	299	<0.127
Chloride	mg/L	N/A	649	547	590	543	534	544	529	521	529	-	491	146.0	504.0	-	437	369	383
Fluoride	mg/L	N/A	0.5	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	ND	ND	ND	2.01	0.138	ND	0.120J	0.158J
pH, Field	SU	N/A	6.02-7.56	7.39	7.16	6.95	6.84	6.68	6.70	6.55	6.47	6.86	6.75	6.56	6.94	6.95	6.41	6.77	6.69
Sulfate	mg/L	N/A	2,640	1,470	1,790	1,790	1,960	2,150	2,090	2,120	2,200	-	1,890	520	1,720	-	1,480	1,300	1,430
Total Dissolved Solids	mg/L	N/A	4,930	3,050	3,460	3,670	3,680	4,050	3,920	4,020	4,070	-	3,730	1,270	3,750	-	3,160	2,080	2,880
Appendix IV																			
Antimony	mg/L	0.006	0.002	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	ND	-	-	-	ND	ND	<0.000378	<0.000378
Arsenic	mg/L	0.01	0.00255	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	0.0	0.0	0.00255	<0.000313
Barium	mg/L	2	0.06	0.05	0.05	0.05	0.06	0.06	0.06	0.05	0.05	ND	-	-	-	0.0142	0.0477	0.0467	<0.00160
Beryllium	mg/L	0.004	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	ND	ND	ND	ND	0.000184	<0.000182
Cadmium	mg/L	0.005	0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND	ND	ND	ND	ND	ND	<0.000217	<0.000217
Chromium	mg/L	0.1	0.00617	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	0.00617	0.00249	<0.00153
Cobalt	mg/L	0.006	0.00226	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND	ND	ND	ND	0.000561	0.00226	<0.000134
Radium-226/228	pCi/L	10.1	9.82	3.5	3.3	4.8	6.1	5.1	6.7	7.6	7.2	4.65	4.79	0.47	3.72	0.662	4.25	4.61	4.59
Fluoride	mg/L	4	0.5	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	ND	ND	ND	2.01	0.138	ND	0.12	0.158J
Lead	mg/L	0.015	0.01	<0.01	<0.01	<0.01	0.0	<0.01	<0.01	<0.01	<0.01	ND	ND	ND	ND	ND	ND	<0.000128	<0.000128
Lithium	mg/L	0.552	0.521	0.39	0.41	0.48	0.45	0.44	0.44	0.40	0.36	0.443	0.417	0.179	0.403	0.197	0.365	0.332	<0.00339
Mercury	mg/L	0.002	0.0002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	ND	ND	ND	ND	<0.000130	<0.000130
Molybdenum	mg/L	0.1	0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND	-	-	-	ND	ND	<0.000610	<0.000610
Selenium	mg/L	0.05	0.005	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	<0.00151	<0.00151
Thallium	mg/L	0.002	0.001	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	ND	ND	ND	ND	ND	ND	<0.000148	<0.000148

Notes:
NTU - Nephelometric Turbiditiy Unit.
mV - milli Volt
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
pCi/L - picocuries per liter.
J - Value is below the Reporting Limit and above the Method Detection Limit; therfore, value is estimated and not considered significant.
MCL - Maximum Contaminant Level, EPA Drinking Water Standards and Health Advisories, April, 2012.
-- - not analyzed.
All metals were analyzed as total unless otherwise specified.

			Sample Location:	SFL MW-2															
			Compliance Phase:	Background								Initial A.M.		Assessment Monitoring					
			Sample Dates:	6/23/2016	8/25/2016	10/19/2016	12/22/2016	2/22/2017	5/3/2017	6/14/2017	8/23/2017	3/20/2018	6/12/2018	6/26/2019	1/16/2019	12/17/2019	6/16/2020	2/9/2021	7/13/2021
Constituent	Unit	MCL	Site BTV																
Field Parameters																			
pH	su	-	-	-	-	-	-	-	-	-	-	6.3	5.96	6.5	6.69	6.64	5.58	6.55	5.74
Conductivity	µS/cm	-	-	-	-	-	-	-	-	-	-	9,410	1,130	9,890	9,940	1,000	1,080	7,329	11,333
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	1.8	2.9	0	1.8	54.4	25.7	5.54	9.98
Dissolved Oxygen	mg/L	-	-	-	-	-	-	-	-	-	-	0	3.14	2.24	2.59	0.62	0.23	0.19	0.33
Temperature	°C	-	-	-	-	-	-	-	-	-	-	23.12	27.29	29.7	19.75	21.5	30.05	19.8	23.9
Oxidation Reduction Potential	mV	-	-	-	-	-	-	-	-	-	-	229	197	206	210	158	235	224.0	266.7
Appendix III																			
Boron	mg/L	N/A	0.621	0.52	0.60	0.57	0.54	0.55	0.55	0.51	0.57	-	ND	0.515	ND	-	0.489	0.464	0.552
Calcium	mg/L	N/A	542	797	890	944	692	578	806	829	833	-	805	937.0	585	-	944	691	946
Chloride	mg/L	N/A	649	2,900	2,810	2,790	2,590	2,480	2,760	2,910	2,910	-	2,650	3,140	2,450	-	3,250	2,100	3,290
Fluoride	mg/L	N/A	0.5	0.3	0.1	0.2	0.3	0.4	0.3	0.3	0.3	ND	ND	ND	3.06	ND	ND	0.190J	0.433J
pH, Field	SU	N/A	6.02-7.56	6.32	5.61	6.40	6.60	6.80	6.19	6.05	6.09	6.25	5.96	6.54	6.69	6.6	5.6	6.6	5.74
Sulfate	mg/L	N/A	2,640	2,010	1,900	1,980	1,770	1,740	1,810	1,890	1,890	-	1,720	1,720	1,480	-	1,760	1,290	1,890
Total Dissolved Solids	mg/L	N/A	4,930	7,950	7,680	6,480	6,830	6,630	6,720	6,940	7,120	-	8,340	7,630	6,090	-	6,970	5,730	6,760
Appendix IV																			
Antimony	mg/L	0.006	0.002	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	ND	-	-	-	ND	ND	<0.000378	<0.000378
Arsenic	mg/L	0.01	0.00255	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	0.0015	0.0016	0.00227	0.00147
Barium	mg/L	2	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.03	0.02	ND	-	-	-	0.0235	0.0262	0.0235	0.0265
Beryllium	mg/L	0.004	0.001	0.002	0.002	0.002	0.001	<0.001	0.002	0.002	0.003	ND	0.00475	0.00444	ND	0.00247	0.00722	0.00132	0.00626
Cadmium	mg/L	0.005	0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND	ND	0.00	ND	0.00185	0.00277	0.000761J	0.00285
Chromium	mg/L	0.1	0.00617	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	<0.00153	<0.00153
Cobalt	mg/L	0.006	0.00226	0.02	0.02	0.02	0.06	<0.02	<0.02	<0.02	0.02	0.0112	0.0178	0.0187	0.0103	0.0136	0.0214	0.011	0.0159
Radium-226/228	pCi/L	10.1	9.82	11	20.6	12.9	6.6	7.1	7.200	8.4	9	7.46	8.33	7.57	6.91	6.53	8.27	8.220	8.1
Fluoride	mg/L	4	0.5	0.3	0.1	0.2	0.3	0.4	0.3	0.3	0.3	ND	ND	ND	3.06	ND	ND	0.190J	0.433J
Lead	mg/L	0.015	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND	ND	ND	ND	ND	0.00132	0.000272J
Lithium	mg/L	0.552	0.521	0.51	0.53	0.58	0.6	0.49	0.53	0.59	0.33	0.476	0.378	0.4	0.408	0.449	0.487	0.476	0.475
Mercury	mg/L	0.002	0.0002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	ND	ND	ND	ND	<0.000130	<0.000130
Molybdenum	mg/L	0.1	0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND	-	-	-	ND	ND	0.00202J	<0.000610
Selenium	mg/L	0.05	0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	<0.00151	<0.00151
Thallium	mg/L	0.002	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	ND	ND	0.00103	ND	ND	ND	0.000612J	0.000865J

Notes:
NTU - Nephelometric Turbiditiy Unit.
mV - milli Volt
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
pCi/L - picocuries per liter.
J - Value is below the Reporting Limit and above the Method Detection Limit; therfore, value is estimated and not considered significant.
MCL - Maximum Contaminant Level, EPA Drinking Water Standards and Health Advisories, April, 2012.
-- - not analyzed.
All metals were analyzed as total unless otherwise specified.

			Sample Location:	SFL MW-3															
			Compliance Phase:	Background								Initial A.M.		Assessment Monitoring					
			Sample Dates:	6/23/2016	8/25/2016	10/19/2016	12/22/2016	2/23/2017	5/2/2017	6/14/2017	8/22/2017	3/20/2018	6/12/2018	6/26/2019	1/16/2019	12/17/2019	6/16/2020	2/10/2021	7/13/2021
Constituent	Unit	MCL	Site BTV																
Field Parameters																			
pH	su	-	-	-	-	-	-	-	-	-	-	3.8	3.82	3.8	3.9	3.89	3.45	3.79	3.70
Conductivity	µS/cm	-	-	-	-	-	-	-	-	-	-	6,980	6,690	6,420	7,500	6,750	6,160	5,292	6,323
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	40.6	25.8	1	9.5	0.3	0	1.01	4.04
Dissolved Oxygen	mg/L	-	-	-	-	-	-	-	-	-	-	0	0.48	0.52	0.97	0.54	0.06	0.00	0.00
Temperature	°C	-	-	-	-	-	-	-	-	-	-	22.49	26.89	24.47	19.49	21.12	27.01	18.7	24.2
Oxidation Reduction Potential	mV	-	-	-	-	-	-	-	-	-	-	410	407	392	345	3.57	432	335.4	402.0
Appendix III																			
Boron	mg/L	N/A	0.621	2.4	2.5	2.87	2.81	2.54	2.49	2.93	2.64	-	3.8	3.85	3.06	-	3.67	3.75	3.87
Calcium	mg/L	N/A	542	687	666	727	735	628	590	672	587	-	567	661	520	-	600	599	594
Chloride	mg/L	N/A	649	1,560	1,490	1,480	1,480	1,440	1,390	1,440	1,390	-	1,040	1,090	1,140	-	1,090	897	946
Fluoride	mg/L	N/A	0.5	0.8	0.7	0.5	0.6	0.6	0.6	0.6	0.6	ND	ND	ND	1.49	0.577	0.526	0.479J	0.427J
pH, Field	SU	N/A	6.02-7.56	3.76	3.50	3.80	3.80	3.80	3.67	3.64	3.67	3.83	3.82	3.82	3.90	3.89	3.45	3.79	3.70
Sulfate	mg/L	N/A	2,640	2,220	2,210	2,170	2,240	2,280	2,290	2,380	2,310	-	2,070	2,100	2,460	-	2,350	2,280	2,330
Total Dissolved Solids	mg/L	N/A	4,930	5,940	5,660	5,010	5,640	5,440	5,130	4,710	5,260	-	5,540	4,480	5,240	-	5,180	5,040	4,990
Appendix IV																			
Antimony	mg/L	0.006	0.002	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	ND	-	-	-	ND	ND	<0.000378	<0.000378
Arsenic	mg/L	0.01	0.00255	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	0.00564	0.00317	0.00317	0.00303
Barium	mg/L	2	0.06	0.04	0.06	0.05	0.03	0.02	0.03	0.03	0.07	ND	-	-	-	0.0136	0.0131	0.013	0.0133
Beryllium	mg/L	0.004	0.001	0.042	0.04	0.034	0.037	0.04	0.034	0.037	0.038	0.0386	0.0308	0.0334	0.0289	0.0357	0.0335	0.0316	0.0315
Cadmium	mg/L	0.005	0.001	0.009	0.01	0.008	0.008	0.008	0.008	0.007	0.008	0.00648	0.00641	0.01	0.0072	0.0069	0.0062	0.00587	0.00608
Chromium	mg/L	0.1	0.00617	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	0.0024	ND	<0.00153	<0.00153
Cobalt	mg/L	0.006	0.00226	0.07	0.07	0.07	0.1	0.07	0.07	0.07	0.07	0.0558	0.0598	0.0622	0.0614	0.0556	0.0598	0.0601	0.0606
Radium-226/228	pCi/L	10.1	9.82	8.19	16.6	10	5.8	7.6	6.9	5	6.1	4.4	4.48	5.43	4.62	3.74	3.65	4.220	4.97
Fluoride	mg/L	4	0.5	0.8	0.7	0.5	0.6	0.6	0.6	0.6	0.6	ND	ND	ND	1.49	0.577	0.526	0.479J	0.0185
Lead	mg/L	0.015	0.01	0.02	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.0191	0.0183	0.0	0.0183	0.0192	0.0206	0.0185	0.29
Lithium	mg/L	0.552	0.521	0.4	0.41	0.44	0.47	0.35	0.29	0.4	0.25	0.322	0.263	0.263	ND	0.325	0.296	0.291	0.00144
Mercury	mg/L	0.002	0.0002	0.003	0.003	0.003	0.003	0.002	0.002	0.001	0.002	0.00182	0.00162	0.00338	0.00176	2.73	0.00191	0.00204	<0.000610
Molybdenum	mg/L	0.1	0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND	-	-	-	ND	ND	<0.000610	<0.00151
Selenium	mg/L	0.05	0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	0.0188	ND	<0.00151	0.427J
Thallium	mg/L	0.002	0.001	0.007	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.00549	0.00552	0.0045	0.00605	0.00634	0.00566	0.00556	0.00538

Notes:
NTU - Nephelometric Turbiditiy Unit.
mV - milli Volt
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
pCi/L - picocuries per liter.
J - Value is below the Reporting Limit and above the Method Detection Limit; therfore, value is estimated and not considered significant.
MCL - Maximum Contaminant Level, EPA Drinking Water Standards and Health Advisories, April, 2012.
-- - not analyzed.
All metals were analyzed as total unless otherwise specified.

			Sample Location:	SFL MW-4															
			Compliance Phase:	Background								Initial A.M.		Assessment Monitoring					
			Sample Dates:	6/23/2016	8/25/2016	10/19/2016	12/22/2016	2/22/2017	5/2/2017	6/14/2017	8/22/2017	3/20/2018	6/12/2018	6/26/2019	1/6/2019	12/17/2019	6/16/2020	2/10/2021	7/13/2021
Constituent	Unit	MCL	Site BTV																
Field Parameters																			
pH	su	-	-	-	-	-	-	-	-	-	-	6.3	6.17	6.2	6.27	6.52	5.82	6.45	6.12
Conductivity	µS/cm	-	-	-	-	-	-	-	-	-	-	8,140	7,810	7,870	8,730	8,200	7,620	6,391	7,630
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	0	16.2	0	0.1	1	8	0.34	3.11
Dissolved Oxygen	mg/L	-	-	-	-	-	-	-	-	-	-	0.97	0.54	0.79	0	11.9	0.03	0.01	0.00
Temperature	°C	-	-	-	-	-	-	-	-	-	-	21.62	27.59	23.51	20.31	19.31	26.21	18.6	23.6
Oxidation Reduction Potential	mV	-	-	-	-	-	-	-	-	-	-	56	56	65	48	18	-20	-31.8	-35.7
Appendix III																			
Boron	mg/L	N/A	0.621	0.6	0.6	0.69	0.61	0.55	0.58	0.59	0.55	-	ND	0.7	ND	-	0.711	0.648	0.809
Calcium	mg/L	N/A	542	799	768	826	858	721	735	780	740	-	673	801	714	-	759	704	752
Chloride	mg/L	N/A	649	1,690	1,680	1,750	1,670	1,730	1,730	1,740	1,730	-	1,410	1,660	1,640	-	1,760	1,580	1,560
Fluoride	mg/L	N/A	0.5	0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	ND	ND	ND	1.7	ND	ND	<0.130	0.204J
pH, Field	SU	N/A	6.02-7.56	6.38	5.94	6.18	6.45	6.35	6.17	5.98	6.01	6.31	6.17	6.15	6.27	6.5	5.8	6.5	6.12
Sulfate	mg/L	N/A	2,640	2,150	2,100	2,190	2,100	2,230	2,280	2,280	2,240	-	2,010	2,080	2,220	-	2,320	1,870	2,390
Total Dissolved Solids	mg/L	N/A	4,930	6,200	6,160	5,850	6,000	6,000	5,700	5,700	5,900	-	6,470	5,310	6,170	-	6,010	5,720	5,770
Appendix IV																			
Antimony	mg/L	0.006	0.002	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	ND	-	-	-	ND	ND	<0.000378	<0.000378
Arsenic	mg/L	0.01	0.00255	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	0.00106	<0.000313
Barium	mg/L	2	0.06	0.04	0.03	0.03	0.03	0.02	0.03	0.02	0.02	ND	-	-	-	0.023	0.024	0.0247	0.0262
Beryllium	mg/L	0.004	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	ND	ND	ND	ND	<0.000182	<0.000182
Cadmium	mg/L	0.005	0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND	ND	ND	ND	ND	ND	<0.000217	<0.000217
Chromium	mg/L	0.1	0.00617	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	<0.00153	<0.00153
Cobalt	mg/L	0.006	0.00226	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.02	<0.02	ND	ND	ND	ND	ND	ND	<0.000134	<0.000134
Radium-226/228	pCi/L	10.1	9.82	6.85	5.28	4.2	0.4	3.2	1.500	2.6	2.1	1.65	1.81	1.28	1.18	1.28	1.26	1.120	1.66
Fluoride	mg/L	4	0.5	0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	ND	ND	ND	1.7	ND	ND	<0.130	0.204J
Lead	mg/L	0.015	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND	ND	ND	ND	ND	<0.000128	<0.000128
Lithium	mg/L	0.552	0.521	0.48	0.49	0.52	0.58	0.45	0.42	0.48	0.34	0.478	0.348	0.377	0.401	0.418	0.432	0.402	0.401
Mercury	mg/L	0.002	0.0002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	ND	ND	ND	ND	<0.000130	<0.000130
Molybdenum	mg/L	0.1	0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND	-	-	-	ND	ND	0.00106J	0.00208J
Selenium	mg/L	0.05	0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	<0.00151	<0.00151
Thallium	mg/L	0.002	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.006	ND	ND	ND	ND	ND	ND	<0.000148	<0.000148

Notes:
NTU - Nephelometric Turbiditiy Unit.
mV - milli Volt
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
pCi/L - picocuries per liter.
J - Value is below the Reporting Limit and above the Method Detection Limit; therfore, value is estimated and not considered significant.
MCL - Maximum Contaminant Level, EPA Drinking Water Standards and Health Advisories, April, 2012.
-- - not analyzed.
All metals were analyzed as total unless otherwise specified.

			Sample Location:	SFL MW-5															
			Compliance Phase:	Background								Initial A.M.		Assessment Monitoring					
			Sample Dates:	6/23/3016	8/25/2016	10/19/2016	12/21/2016	2/23/2017	5/3/2017	6/14/2017	8/23/2017	3/20/2018	6/8/2018	6/26/2019	1/16/2019	12/17/2019	6/16/2020	2/9/2021	7/13/2021
Constituent	Unit	MCL	Site BTV																
Field Parameters																			
pH	su	-	-	-	-	-	-	-	-	-	-	4.7	4.43	4.4	4.64	4.91	4.27	4.64	4.24
Conductivity	µS/cm	-	-	-	-	-	-	-	-	-	-	1,140	1,160	1,070	1,150	1,170	1,110	8,840	10,864
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	0.5	7.3	0	0	8.6	4.5	11.01	4.88
Dissolved Oxygen	mg/L	-	-	-	-	-	-	-	-	-	-	0	0.69	2.97	3.03	0.74	0.41	0.19	0.00
Temperature	°C	-	-	-	-	-	-	-	-	-	-	21.98	27.13	24.09	18.52	21.37	25.3	21.4	23.3
Oxidation Reduction Potential	mV	-	-	-	-	-	-	-	-	-	-	367	388	363	359	308	356	353.9	400.4
Appendix III																			
Boron	mg/L	N/A	0.621	3.5	3.6	3.74	3.93	2.98	3.97	4.18	4.12	-	4.42	6.04	4.08	-	5.35	4.34	5.1
Calcium	mg/L	N/A	542	878	906	903	944	755	883	899	864	-	873	857	715	-	812	837	816
Chloride	mg/L	N/A	649	2,990	2,950	3,070	3,160	3,020	3,040	3,160	3,190	-	3,010	3,180	2,880	-	3,000	2,340	2,930
Fluoride	mg/L	N/A	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	ND	ND	ND	5.89	ND	ND	<0.260	0.342J
pH, Field	SU	N/A	6.02-7.56	5.05	4.34	4.7	4.48	5.1	4.49	4.44	4.58	4.67	4.43	4.4	4.64	4.91	4.27	4.64	4.24
Sulfate	mg/L	N/A	2,640	2,150	2,090	2,100	2,170	2,120	2,150	2,220	2,240	-	2,290	2,100	2,070	-	2,190	1,720	2,330
Total Dissolved Solids	mg/L	N/A	4,930	8,350	7,960	7,530	7,910	7,530	7,380	7,600	7,520	-	7,470	6,890	7,300	-	7,250	7,820	8,110
Appendix IV																			
Antimony	mg/L	0.006	0.002	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	ND	-	-	-	ND	ND	<0.000378	<0.000378
Arsenic	mg/L	0.01	0.00255	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	0.00234	0.00145	0.0033	0.00151
Barium	mg/L	2	0.06	0.04	0.08	0.06	0.03	0.02	0.03	0.02	0.02	ND	-	-	-	0.0209	0.0192	0.0212	0.0179
Beryllium	mg/L	0.004	0.001	0.008	0.011	0.01	0.01	0.01	0.012	0.011	0.01	ND	0.0105	0.0123	0.00885	0.0101	0.0113	0.00918	0.0104
Cadmium	mg/L	0.005	0.001	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	0.005	0.006	ND	0.00538	0.00511	0.00531	0.00509	0.00564	0.00385	0.0047
Chromium	mg/L	0.1	0.00617	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	0.00241	0.00441	0.0044
Cobalt	mg/L	0.006	0.00226	0.07	0.06	0.05	0.06	0.05	0.05	0.05	0.05	0.0398	0.0486	0.0559	0.0492	0.0453	0.0512	0.045	0.0515
Radium-226/228	pCi/L	10.1	9.82	7.52	25.6	11.5	8.7	11.9	9.9	11.6	12.3	12.1	9.65	11.2	11.3	12.1	11.5	13.5	13.6
Fluoride	mg/L	4	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	ND	ND	ND	5.89	ND	ND	<0.260	0.342J
Lead	mg/L	0.015	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND	0.00459	ND	0.00102	ND	0.000725J	0.000721J
Lithium	mg/L	0.552	0.521	0.66	0.79	0.9	0.99	0.72	0.79	0.92	0.62	0.685	0.629	0.643	0.643	0.67	0.704	0.677	0.645
Mercury	mg/L	0.002	0.0002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	ND	ND	ND	ND	<0.000130	<0.000130
Molybdenum	mg/L	0.1	0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND	-	-	-	ND	ND	0.00180J	<0.000610
Selenium	mg/L	0.05	0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	0.00989	ND	<0.00151	<0.00151
Thallium	mg/L	0.002	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	ND	ND	0.00115	ND	0.00136	0.00118	0.0012	0.00133

Notes:
NTU - Nephelometric Turbiditiy Unit.
mV - milli Volt
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
pCi/L - picocuries per liter.
J - Value is below the Reporting Limit and above the Method Detection Limit; therfore, value is estimated and not considered significant.
MCL - Maximum Contaminant Level, EPA Drinking Water Standards and Health Advisories, April, 2012.
-- - not analyzed.
All metals were analyzed as total unless otherwise specified.

			Sample Location:	SFL MW-6															
			Compliance Phase:	Background								Initial A.M.		Assessment Monitoring					
			Sample Dates:	6/23/2016	8/25/2016	10/19/2016	12/21/2016	2/22/2017	5/3/2017	6/13/2017	8/23/2017	3/20/2018	6/8/2018	6/27/2019	1/15/2019	12/17/2019	6/16/2020	2/9/2021	7/13/2021
Constituent	Unit	MCL	Site BTV																
Field Parameters																			
pH	su	-	-	-	-	-	-	-	-	-	-	3.9	3.95	3.9	4.07	4.16	3.9	3.82	3.76
Conductivity	µS/cm	-	-	-	-	-	-	-	-	-	-	1,310	1,330	1,350	1,280	1,330	1,230	10,492	12,607
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	0	0.9	8.9	0	2.2	28.1	41.50	4.54
Dissolved Oxygen	mg/L	-	-	-	-	-	-	-	-	-	-	0	0.84	3.14	0	1.57	0.79	0.25	0.30
Temperature	°C	-	-	-	-	-	-	-	-	-	-	21.05	26.54	26	19.96	18.99	28.65	20.6	25.5
Oxidation Reduction Potential	mV	-	-	-	-	-	-	-	-	-	-	463	478	488	443	418	471	435.5	454.5
Appendix III																			
Boron	mg/L	N/A	0.621	0.5	0.39	0.41	0.4	0.24	0.3	0.16	0.35	-	ND	0.29	ND	-	0.384	0.329	0.38
Calcium	mg/L	N/A	542	910	929	983	977	852	955	892	864	-	915	800	824	-	950	953	937
Chloride	mg/L	N/A	649	3,350	3,470	3,500	3,580	3,570	3,560	3,640	3,730	-	3,670	3,240	3,490	-	3,760	3,310	3,340
Fluoride	mg/L	N/A	0.5	0.7	0.8	0.8	0.8	0.9	0.8	0.7	0.7	ND	ND	ND	8.72	ND	ND	0.531J	0.527J
pH, Field	SU	N/A	6.02-7.56	4.4	3.84	4.15	3.92	4.21	3.99	3.99	3.98	3.94	3.95	3.91	4.07	4.16	3.9	3.82	3.76
Sulfate	mg/L	N/A	2,640	2,230	2,240	2,170	2,120	2,260	2,260	2,330	2,470	-	2,520	1,870	2,500	-	2,350	2,070	2,190
Total Dissolved Solids	mg/L	N/A	4,930	8,650	8,850	8,170	8,640	8,790	8,020	9,200	8,260	-	6,330	7,040	8,850	-	11,000	8,350	7,420
Appendix IV																			
Antimony	mg/L	0.006	0.002	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	ND	-	-	-	ND	ND	<0.000378	<0.000378
Arsenic	mg/L	0.01	0.00255	0.02	0.01	<0.01	<0.01	0.01	0.02	<0.01	0.01	ND	-	-	-	0.02	0.01	0.0135	0.0125
Barium	mg/L	2	0.06	0.30	0.08	0.06	0.05	0.04	0.03	0.04	0.04	ND	-	-	-	0.0247	0.0309	0.0537	0.0376
Beryllium	mg/L	0.004	0.001	0.028	0.049	0.051	0.047	0.056	0.054	0.047	0.056	0.0599	0.0449	0.0496	0.0418	0.052	0.0503	0.0489	0.0463
Cadmium	mg/L	0.005	0.001	0.007	0.01	0.011	0.011	0.013	0.01	0.011	0.012	0.00875	0.00942	0.01	0.00955	0.0118	0.0104	0.0105	0.0104
Chromium	mg/L	0.1	0.00617	0.01	<0.01	0.01	0.011	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	0.00797	ND	0.00757	0.00551
Cobalt	mg/L	0.006	0.00226	0.11	0.12	0.12	0.12	0.13	0.11	0.11	0.12	0.104	0.1	0.105	0.112	0.104	0.109	0.116	0.111
Radium-226/228	pCi/L	10.1	9.82	11.6	28.8	10.8	14.3	6.8	8.6	9	3.9	9.22	9.02	11.8	10.1	28.3	17.8	14.6	13.7
Fluoride	mg/L	4	0.5	0.7	0.8	0.8	0.8	0.9	0.8	0.7	0.7	ND	ND	ND	8.72	ND	ND	0.531J	0.527J
Lead	mg/L	0.015	0.01	0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0054	ND	0.0	0.00549	0.0171	0.0115	0.015	0.0109
Lithium	mg/L	0.552	0.521	0.55	0.8	0.88	0.93	0.74	0.72	0.69	0.56	0.739	0.597	0.663	0.619	0.64	0.709	0.614	0.64
Mercury	mg/L	0.002	0.0002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	ND	ND	ND	ND	<0.000130	<0.000130
Molybdenum	mg/L	0.1	0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND	-	-	-	ND	ND	<0.000610	<0.000610
Selenium	mg/L	0.05	0.005	<0.01	0.01	0.02	<0.01	0.01	0.01	<0.01	<0.01	ND	-	-	-	0.0525	ND	<0.00151	<0.00151
Thallium	mg/L	0.002	0.001	0.004	0.002	0.004	0.003	0.004	0.003	0.004	0.003	0.00322	0.00305	0.00264	0.00315	0.0041	0.00333	0.00339	0.00329

Notes:
NTU - Nephelometric Turbiditiy Unit.
mV - milli Volt
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
pCi/L - picocuries per liter.
J - Value is below the Reporting Limit and above the Method Detection Limit; therfore, value is estimated and not considered significant.
MCL - Maximum Contaminant Level, EPA Drinking Water Standards and Health Advisories, April, 2012.
-- - not analyzed.
All metals were analyzed as total unless otherwise specified.

			Sample Location:	SFL MW-7															
			Compliance Phase:	Background								Initial A.M.		Assessment Monitoring					
			Sample Dates:	5/11/2017	5/31/2017	6/14/2014	6/28/2017	7/20/2017	8/23/2017	8/31/2017	9/7/2017	3/20/2018	6/12/2018	6/26/2019	1/16/2019	12/17/2019	6/16/2020	2/10/2021	7/13/2021
Constituent	Unit	MCL	Site BTV																
Field Parameters																			
pH	su	-	-	-	-	-	-	-	-	-	-	6.5	6.33	6.8	6.69	6.7	6.01	6.64	6.34
Conductivity	µS/cm	-	-	-	-	-	-	-	-	-	-	9,210	8,820	8,830	9,800	9,370	8,240	5,680	6,956
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	0	7.6	0	0	20.3	0	2.43	2.26
Dissolved Oxygen	mg/L	-	-	-	-	-	-	-	-	-	-	0.29	2.53	3.48	1.74	0.83	0.34	0.10	0.27
Temperature	°C	-	-	-	-	-	-	-	-	-	-	20.43	28.91	23.25	18.84	18.8	25.31	19.5	23.9
Oxidation Reduction Potential	mV	-	-	-	-	-	-	-	-	-	-	-102	-42	18	19	-82	-43	-28.6	-9.9
Appendix III																			
Boron	mg/L	N/A	0.621	0.75	0.78	0.76	0.73	0.83	0.92	0.7	0.59	-	ND	0.879	ND	-	0.832	0.792	0.795
Calcium	mg/L	N/A	542	678	654	662	620	664	693	628	613	-	591	588	523	-	643	400	395
Chloride	mg/L	N/A	649	2,870	2,740	2,800	2,850	2,780	2,810	2,770	2,820	-	2,600	2,700	2,580	-	2,880	1,920	1,900
Fluoride	mg/L	N/A	0.5	0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	ND	ND	ND	2.62	ND	ND	<0.130	0.190J
pH, Field	SU	N/A	6.02-7.56	6.37	6.43	6.17	6.32	6.34	6.21	6.11	6.24	-	6.47	6.79	6.69	6.7	6.01	6.64	6.34
Sulfate	mg/L	N/A	2,640	811	778	779	787	770	801	768	770	-	743	630	694	-	816	576	672
Total Dissolved Solids	mg/L	N/A	4,930	7,260	6,810	6,460	6,620	6,640	6,230	6,650	6,810	-	6,840	5,410	6,090	-	5,830	4,430	4,200
Appendix IV																			
Antimony	mg/L	0.006	0.002	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	ND	-	-	-	ND	ND	0.000579J	<0.000378
Arsenic	mg/L	0.01	0.00255	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	<0.000313	<0.000313
Barium	mg/L	2	0.06	0.04	0.04	0.03	0.03	0.04	0.03	0.03	0.04	ND	-	-	-	0.037	0.0342	0.051	0.0476
Beryllium	mg/L	0.004	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	ND	ND	ND	ND	<0.000182	<0.000182
Cadmium	mg/L	0.005	0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND	ND	ND	ND	ND	ND	<0.000217	<0.000217
Chromium	mg/L	0.1	0.00617	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	<0.00153	<0.00153
Cobalt	mg/L	0.006	0.00226	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND	ND	ND	ND	ND	<0.000134	<0.000134
Radium-226/228	pCi/L	10.1	9.82	1.9	4.4	2.3	2.6	2.6	3.4	1.4	2.9	1.98	2	2.2	2.36	1.96	1.99	2.56	2.77
Fluoride	mg/L	4	0.5	0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	ND	ND	ND	2.62	ND	ND	<0.130	0.190J
Lead	mg/L	0.015	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND	ND	ND	ND	ND	0.000211J	<0.000128
Lithium	mg/L	0.552	0.521	0.46	0.45	0.5	0.46	0.43	0.4	0.4	0.37	0.466	0.379	0.408	0.388	0.45	0.447	0.375	0.389
Mercury	mg/L	0.002	0.0002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	ND	ND	ND	ND	<0.000130	<0.000130
Molybdenum	mg/L	0.1	0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND	-	-	-	ND	ND	<0.000610	<0.000610
Selenium	mg/L	0.05	0.005	<0.01	0.02	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	<0.00151	<0.00151
Thallium	mg/L	0.002	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	ND	ND	ND	ND	ND	ND	<0.000148	<0.000148

Notes:
NTU - Nephelometric Turbiditiy Unit.
mV - milli Volt
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
pCi/L - picocuries per liter.
J - Value is below the Reporting Limit and above the Method Detection Limit; therfore, value is estimated and not considered significant.
MCL - Maximum Contaminant Level, EPA Drinking Water Standards and Health Advisories, April, 2012.
-- - not analyzed.
All metals were analyzed as total unless otherwise specified.

			Sample Location:	MNW-15															
			Compliance Phase:	Background								Initial A.M.		Assessment Monitoring					
			Sample Dates:	5/2/2017	5/31/2017	6/14/2017	6/28/2017	7/20/2017	8/22/2017	8/31/2017	9/7/2017	3/20/2018	6/12/2018	6/26/2019	1/16/2019	12/17/2019	6/16/2020	2/9/2021	7/13/2021
Constituent	Unit	MCL	Site BTV																
Field Parameters																			
pH	su	-	-	-	-	-	-	-	-	-	-	3.6	3.65	3.4	3.7	3.78	3.21	3.63	3.57
Conductivity	µS/cm	-	-	-	-	-	-	-	-	-	-	4,040	3,970	3,920	4,190	4,240	3,880	3,403	4,097
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	0	6.4	0	2.7	0	0	7.03	11.89
Dissolved Oxygen	mg/L	-	-	-	-	-	-	-	-	-	-	0	1.7	2.86	0	0	3.82	0.51	0.00
Temperature	°C	-	-	-	-	-	-	-	-	-	-	18.99	28.09	24.49	20.06	20.23	24.71	22.0	24.3
Oxidation Reduction Potential	mV	-	-	-	-	-	-	-	-	-	-	315	325	314	286	274	343	329.6	297.2
Appendix III																			
Boron	mg/L	N/A	0.621	9.51	8.75	8.62	9.67	9.38	9.22	9.43	9.26	-	11.8	9.64	8.56	-	8.3	9.06	8.44
Calcium	mg/L	N/A	542	280	269	256	263	275	254	264	260	-	249	272	244	-	327	325	304
Chloride	mg/L	N/A	649	730	704	688	734	704	718	721	740	-	581	578	667	-	654	584	669
Fluoride	mg/L	N/A	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	ND	ND	0.718	1.04	1.03	0.794	0.84	0.617
pH, Field	SU	N/A	6.02-7.56	3.7	3.64	3.53	3.48	3.46	3.42	3.32	3.48	3.61	3.65	3.44	3.7	3.78	3.21	3.63	3.57
Sulfate	mg/L	N/A	2,640	1,270	1,230	1,190	1,290	1,240	1,250	1,260	1,280	-	1,250	1,210	1,310	-	1,370	1,350	1,480
Total Dissolved Solids	mg/L	N/A	4,930	2,540	2,720	2,620	2,580	2,690	2,620	2,700	2,750	-	2,940	2,690	3,030	-	3,170	6,150	4,100
Appendix IV																			
Antimony	mg/L	0.006	0.002	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	ND	-	-	-	ND	ND	<0.000378	<0.000378
Arsenic	mg/L	0.01	0.00255	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	0.0114	0.00624	0.00774	0.00734
Barium	mg/L	2	0.06	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.03	ND	-	-	-	0.016	0.0171	0.0175	0.0159
Beryllium	mg/L	0.004	0.001	0.077	0.071	0.072	0.076	0.068	0.074	0.073	0.067	0.0792	0.0619	0.0818	0.0606	0.091	0.088	0.0902	0.0789
Cadmium	mg/L	0.005	0.001	0.093	0.106	0.116	0.089	0.091	0.084	0.088	0.089	0.0895	0.0886	0.03	0.0945	0.0313	0.0388	0.0421	0.0393
Chromium	mg/L	0.1	0.00617	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	0.0579	<0.00153	<0.00153
Cobalt	mg/L	0.006	0.00226	0.27	0.28	0.26	0.3	0.3	0.29	0.29	0.29	0.253	0.281	0.359	0.297	0.3	0.315	0.356	0.349
Radium-226/228	pCi/L	10.1	9.82	0.7	0.3	1.2	1.5	0.8	0.3	2.1	1.9	0.446	0.39	0.29	0.619	0.414	0.167	0.577	0.525
Fluoride	mg/L	4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	ND	ND	0.718	1.04	1.03	0.794	0.84	0.617
Lead	mg/L	0.015	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	ND	ND	ND	0.00297	ND	0.00225	0.000555J	0.000404J
Lithium	mg/L	0.552	0.521	0.09	0.07	0.11	0.08	0.06	0.05	0.05	0.05	ND	0.0701	0.0898	ND	0.108	0.106	0.111	0.102
Mercury	mg/L	0.002	0.0002	<0.001	<0.001	0.012	<0.001	<0.001	<0.001	<0.001	<0.001	0.000949	0.000396	ND	0.000942	ND	ND	<0.000130	<0.000130
Molybdenum	mg/L	0.1	0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND	-	-	-	ND	ND	<0.000610	<0.000610
Selenium	mg/L	0.05	0.005	<0.01	0.03	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	0.0345	ND	<0.00151	<0.00151
Thallium	mg/L	0.002	0.001	<0.002	0.002	0.002	<0.002	<0.002	0.002	<0.002	0.002	0.00232	0.00233	ND	0.00248	ND	ND	0.000739J	0.000901J

Notes:
NTU - Nephelometric Turbiditiy Unit.
mV - milli Volt
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
pCi/L - picocuries per liter.
J - Value is below the Reporting Limit and above the Method Detection Limit; therfore, value is estimated and not considered significant.
MCL - Maximum Contaminant Level, EPA Drinking Water Standards and Health Advisories, April, 2012.
-- - not analyzed.
All metals were analyzed as total unless otherwise specified.

			Sample Location:	SSP/AP MW-1															
			Compliance Phase:	Background								Initial A.M.		Assessment Monitoring					
			Sample Dates:	6/21/2016	8/23/2016	10/17/2016	12/20/2016	2/21/2017	5/3/2017	6/12/2017	8/23/2017	3/21/2018	6/9/2018	6/27/2019	1/15/2019	12/18/2019	6/17/2020	2/9/2021	7/12/2021
Constituent	Unit	MCL	Site BTV																
Field Parameters																			
pH	su	-	-	-	-	-	-	-	-	-	-	5.7	5.73	6.0	5.87	6.06	5.42	5.77	5.60
Conductivity	µS/cm	-	-	-	-	-	-	-	-	-	-	9,270	7,720	8,980	8,970	9,010	8,310	7,389	8,918
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	48	413	0	19.9	48.1	20.9	141.70	170.11
Dissolved Oxygen	mg/L	-	-	-	-	-	-	-	-	-	-	0	0.52	3.67	2.95	0.62	0.08	0.04	0.00
Temperature	°C	-	-	-	-	-	-	-	-	-	-	23.3	26.4	23.97	18.99	19.69	27.81	20.0	22.0
Oxidation Reduction Potential	mV	-	-	-	-	-	-	-	-	-	-	15	18	76	57	32	107	71.1	-100.3
Appendix III																			
Boron	mg/L	N/A	1.490	1.1	1	0.93	0.83	0.77	0.81	0.74	0.81	-	ND	0.811	1.43	-	0.75	0.69	0.757
Calcium	mg/L	N/A	728	659	683	673	685	617	681	666	653	-	647	659	563	-	643	667	619
Chloride	mg/L	N/A	1,770	1,390	1,460	1,540	1,500	1,530	1,550	1,600	1,600	-	1,480	1,640	1,500	-	1,730	1,520	1,460
Fluoride	mg/L	N/A	0.5	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	ND	ND	ND	ND	ND	ND	<0.130	0.423J
pH, Field	SU	N/A	5.26-6.35	5.89	5.93	6.03	6.01	5.56	5.8	5.73	5.80	5.69	5.73	5.97	5.87	6.06	5.42	5.77	5.60
Sulfate	mg/L	N/A	3,320	2,890	2,950	2,960	2,760	2,900	3,050	3,060	3,070	-	3,160	2,980	3,070	-	3,210	2,920	3,050
Total Dissolved Solids	mg/L	N/A	8,180	6,950	6,800	6,750	6,470	6,520	6,460	6,720	6,530	-	6,700	7,240	7,060	-	7,890	5,630	5,930
Appendix IV																			
Antimony	mg/L	0.006	0.002	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	ND	-	-	-	ND	ND	0.000721J	0.000732J
Arsenic	mg/L	0.01	0.00100	<0.01	<0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	ND	ND	ND	0.0041	0.00194	0.00169	0.00501	0.00415
Barium	mg/L	2	0.183	0.05	0.05	<0.1	0.07	0.05	0.04	0.06	0.05	ND	-	-	-	0.0252	0.0284	0.184	0.0638
Beryllium	mg/L	0.004	0.00157	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	0.001	ND	ND	ND	ND	ND	ND	0.00157	0.00101
Cadmium	mg/L	0.005	0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND	ND	ND	ND	ND	ND	<0.000217	<0.000217
Chromium	mg/L	0.1	0.00248	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	0.00248	<0.00153
Cobalt	mg/L	0.006	0.00174	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND	ND	ND	ND	ND	0.00174	0.000649
Radium-226/228	pCi/L	10.1	3.96	2.6	2.92	2.2	-0.06	0.6	1.5	1.7	1.7	1.51	1.22	1.07	1.81	1.47	1.33	3.38	2.09
Fluoride	mg/L	4	0.5	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	ND	ND	ND	ND	ND	ND	<0.130	0.423J
Lead	mg/L	0.015	0.0106	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND	ND	ND	ND	0.001	0.0106	0.00343
Lithium	mg/L	0.552	1.64	1.36	1.15	1.3	1.28	1.21	1.5	1.51	1.35	2.15	1.21	1.4	1.25	1.05	1.43	1.23	1.24
Mercury	mg/L	0.002	0.0002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	-	-	-	ND	ND	<0.000130	<0.000130
Molybdenum	mg/L	0.1	0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND	-	-	-	ND	ND	0.00199J	0.000961J
Selenium	mg/L	0.05	0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	<0.00151	<0.00151
Thallium	mg/L	0.002	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	ND	ND	ND	ND	ND	ND	0.000206J	0.000388J

Notes:
NTU - Nephelometric Turbiditiy Unit.
mV - milli Volt
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
pCi/L - picocuries per liter.
J - Value is below the Reporting Limit and above the Method Detection Limit; therfore, value is estimated and not considered significant.
MCL - Maximum Contaminant Level, EPA Drinking Water Standards and Health Advisories, April, 2012.
-- - not analyzed.
All metals were analyzed as total unless otherwise specified.

			Sample Location:	AP MW-1D														
			Compliance Phase:	Background								Initial A.M.		Assessment Monitoring				
			Sample Dates:	6/22/2016	8/24/2016	10/18/2016	12/21/2016	2/21/2017	5/4/2017	6/13/2017	8/24/2017	3/21/2018	6/13/2018	6/25/2019	1/15/2019	12/18/2019	6/17/2020	2/10/2021	7/12/2021
Constituent	Unit	MCL	Site BTV															
Field Parameters																		
pH	su	-	-	-	-	-	-	-	-	-	-	5.8	5.69	5.8	5.93	5.75	5.48	6.13	5.91
Conductivity	µS/cm	-	-	-	-	-	-	-	-	-	-	1,960	1,960	1,950	1,690	1,910	1,970	1,453	1,613
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	9.4	12.7	8.8	0.4	0	0	0.45	3.96
Dissolved Oxygen	mg/L	-	-	-	-	-	-	-	-	-	-	0	1.1	0.61	0	0	0.31	0.00	0.03
Temperature	°C	-	-	-	-	-	-	-	-	-	-	20.93	26.43	26.6	19.96	19.28	24.52	20.1	22.3
Oxidation Reduction Potential	mV	-	-	-	-	-	-	-	-	-	-	94	143	180	138	137	141	135.2	106.5
Appendix III																		
Boron	mg/L	N/A	1.490	4.9	4.81	4.62	4.8	4.88	4.72	4.59	4.28	-	5.67	4.84	4.35	-	4.46	6.27	5.15
Calcium	mg/L	N/A	728	88	78	77	77	77	74	71	70	-	76.1	93.3	81.4	-	108	96.5	77.1
Chloride	mg/L	N/A	1,770	227	221	233	229	228	227	229	227	-	191	178	197	-	201	151	141
Fluoride	mg/L	N/A	0.5	0.6	0.7	0.6	0.6	0.7	0.7	0.6	0.8	ND	ND	0.532	0.904	0.529	0.626	0.606	0.764
pH, Field	SU	N/A	5.26-6.35	5.4	5.69	6	6.1	6.1	5.94	5.62	5.74	5.81	5.69	5.8	5.93	5.75	5.48	6.13	5.91
Sulfate	mg/L	N/A	3,320	664	621	590	546	543	527	525	517	-	523	511	532	-	552	456	430
Total Dissolved Solids	mg/L	N/A	8,180	1,490	1,440	1,410	1,360	1,310	1,240	1,310	1,270	-	1,360	1,410	1,350	-	1,400	1,250	1,140
Appendix IV																		
Antimony	mg/L	0.006	0.002	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	ND	-	-	-	ND	ND	<0.000378	<0.000378
Arsenic	mg/L	0.01	0.00100	<0.01	0.01	0.01	<0.01	0.01	0.01	<0.01	0.01	0.00935	0.00861	0.00912	0.00884	0.00756	0.00818	0.00953	0.00898
Barium	mg/L	2	0.183	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	ND	-	-	-	0	0	0.0137	0.0137
Beryllium	mg/L	0.004	0.00157	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	ND	ND	ND	ND	<0.000182	<0.000182
Cadmium	mg/L	0.005	0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND	ND	ND	ND	ND	ND	0.000408J	0.000343J
Chromium	mg/L	0.1	0.00248	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	<0.00153	<0.00153
Cobalt	mg/L	0.006	0.00174	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.0106	0.0129	0.0143	0.0164	0.0146	0.0163	0.0139	0.0177
Radium-226/228	pCi/L	10.1	3.96	2.07	3.83	2.8	2.5	0.6	2.5	0.7	1.8	0.971	1.72	1.66	1.71	2.5	1.86	1.100	2.69
Fluoride	mg/L	4	0.5	0.6	0.7	0.6	0.6	0.7	0.7	0.6	0.8	ND	ND	0.532	0.904	0.529	0.626	0.606	0.764
Lead	mg/L	0.015	0.0106	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	<0.000128	0.000256J
Lithium	mg/L	0.552	1.64	0.07	0.04	0.05	0.08	0.04	0.03	0.04	0.01	ND	ND	0.0328	ND	0.0346	0.0327	0.027	0.0242
Mercury	mg/L	0.002	0.0002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	ND	ND	ND	ND	<0.000130	<0.000130
Molybdenum	mg/L	0.1	0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.0	0.0144	0.0177	0.0174	0.0157	0.0201	0.0283	0.0304
Selenium	mg/L	0.05	0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	0.00154J	0.00164J
Thallium	mg/L	0.002	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	ND	-	-	-	ND	ND	0.000310J	0.000636J

Notes:
NTU - Nephelometric Turbiditiy Unit.
mV - milli Volt
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
pCi/L - picocuries per liter.
J - Value is below the Reporting Limit and above the Method Detection Limit; therfore, value is estimated and not considered significant.
MCL - Maximum Contaminant Level, EPA Drinking Water Standards and Health Advisories, April, 2012.
-- - not analyzed.
All metals were analyzed as total unless otherwise specified.

			Sample Location:	AP MW-3															
			Compliance Phase:	Background								Initial A.M.		Assessment Monitoring					
			Sample Dates:	6/22/2016	8/24/2016	11/10/2016	12/21/2016	2/20/2017	5/3/2017	6/12/2017	8/22/2017	3/20/2018	6/8/2018	6/25/2019	1/15/2019	12/17/2019	6/17/2020	2/10/2021	7/12/2021
Constituent	Unit	MCL	Site BTV																
Field Parameters																			
pH	su	-	-	-	-	-	-	-	-	-	-	5.1	5.12	5.1	5.22	4.99	4.34	5.18	4.96
Conductivity	µS/cm	-	-	-	-	-	-	-	-	-	-	1,830	1,830	1,770	1,530	1,790	1,700	1,473	1,827
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	0	28.1	9.7	0	0.5	0	3.74	8.47
Dissolved Oxygen	mg/L	-	-	-	-	-	-	-	-	-	-	0	0.93	1.06	0.07	0.49	0.67	0.06	0.21
Temperature	°C	-	-	-	-	-	-	-	-	-	-	23.49	24.89	26.36	19.42	19.39	26.96	19.3	22.2
Oxidation Reduction Potential	mV	-	-	-	-	-	-	-	-	-	-	309	303	184	273	309	407	166.1	88.6
Appendix III																			
Boron	mg/L	N/A	1.490	3.7	3.63	3.56	3.88	3.61	3.73	3.58	3.82	-	3.67	4.18	3.49	-	3.23	4.13	3.54
Calcium	mg/L	N/A	728	138	123	127	137	132	139	129	134	-	135	134	121	-	139	134	146
Chloride	mg/L	N/A	1,770	129	128	143	141	146	148	152	155	-	144	147	153	-	160	144	146
Fluoride	mg/L	N/A	0.5	0.2	0.2	0.1	0.1	<0.1	0.1	0.1	0.1	ND	ND	ND	0.223	ND	ND	0.0558J	0.0577J
pH, Field	SU	N/A	5.26-6.35	5.38	5.09	5.4	5.11	5.05	5.02	5.12	4.79	5.09	5.12	5.14	5.22	4.99	4.34	5.18	4.96
Sulfate	mg/L	N/A	3,320	700	731	733	729	720	739	740	751	-	673	637	653	-	807	645	722
Total Dissolved Solids	mg/L	N/A	8,180	1,390	1,400	1,370	1,400	1,400	1,300	1,400	1,360	-	1,770	1,390	1,360	-	1,330	1,370	1,420
Appendix IV																			
Antimony	mg/L	0.006	0.002	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	ND	-	-	-	ND	ND	<0.000378	<0.000378
Arsenic	mg/L	0.01	0.00100	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND	ND	ND	ND	0.00129	0.00154	0.00129
Barium	mg/L	2	0.183	0.04	0.03	0.02	0.03	0.02	0.02	0.02	0.02	ND	-	-	-	0.0243	0.0238	0.0236	0.0294
Beryllium	mg/L	0.004	0.00157	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	ND	ND	0.00241	0.00269	0.00301	0.00236	0.00264	0.00286
Cadmium	mg/L	0.005	0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND	ND	0.00	0.00482	0.00424	0.00432	0.00382	0.00469
Chromium	mg/L	0.1	0.00248	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	0.00173J	<0.00153
Cobalt	mg/L	0.006	0.00174	0.05	0.05	0.05	0.05	0.04	0.05	0.04	0.04	0.0351	0.0396	0.024	0.0428	0.0306	0.0358	0.0476	0.0392
Radium-226/228	pCi/L	10.1	3.96	1.11	7.54	1.7	2.9	2.4	2.9	2.5	4.8	1.82	1.89	2.07	2.09	2.17	1.6	1.870	2.7
Fluoride	mg/L	4	0.5	0.2	0.2	0.1	0.1	<0.1	0.1	0.1	0.1	ND	ND	ND	0.223	ND	ND	0.0558J	0.000470J
Lead	mg/L	0.015	0.0106	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	0.00121	0.000456J	0.0514
Lithium	mg/L	0.552	1.64	0.06	0.06	0.07	0.07	0.06	0.05	0.06	0.04	ND	0.047	0.0461	ND	0.0546	0.0531	0.053	0.00149
Mercury	mg/L	0.002	0.0002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	0.00025	ND	ND	0.000324	0.000455	<0.000610
Molybdenum	mg/L	0.1	0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND	ND	ND	ND	ND	ND	0.000848J	<0.00151
Selenium	mg/L	0.05	0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	<0.00151	0.0577J
Thallium	mg/L	0.002	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	ND	-	-	-	ND	ND	0.000267J	0.000271J

Notes:
NTU - Nephelometric Turbiditiy Unit.
mV - milli Volt
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
pCi/L - picocuries per liter.
J - Value is below the Reporting Limit and above the Method Detection Limit; therfore, value is estimated and not considered significant.
MCL - Maximum Contaminant Level, EPA Drinking Water Standards and Health Advisories, April, 2012.
-- - not analyzed.
All metals were analyzed as total unless otherwise specified.

			Sample Location:	AP MW-4															
			Compliance Phase:	Background								Initial A.M.		Assessment Monitoring					
			Sample Dates:	6/22/2016	8/24/2016	10/18/2016	12/21/2016	2/21/2017	5/4/2017	6/12/2017	8/24/2017	3/21/2018	6/13/2018	6/27/2019	1/15/2019	12/18/2019	6/17/2020	2/10/2021	7/13/2021
Constituent	Unit	MCL	Site BTV																
Field Parameters																			
pH	su	-	-	-	-	-	-	-	-	-	-	5.6	5.58	5.7	5.76	5.71	5.28	5.74	5.48
Conductivity	µS/cm	-	-	-	-	-	-	-	-	-	-	4,930	4,840	4,760	4,900	4,430	4,540	3,923	4,743
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	0	28.7	0	1.4	0	1.5	1.72	2.26
Dissolved Oxygen	mg/L	-	-	-	-	-	-	-	-	-	-	0	0.56	3.98	0	0	0.04	0.00	0.19
Temperature	°C	-	-	-	-	-	-	-	-	-	-	24.06	28.91	24.35	17.59	18.23	25.97	17.1	21.3
Oxidation Reduction Potential	mV	-	-	-	-	-	-	-	-	-	-	110	128	138	81	44	141	148.9	135.7
Appendix III																			
Boron	mg/L	N/A	1.490	2	2.1	2.1	2.11	1.89	2.07	1.95	1.96	-	2.39	2.45	2.17	-	2.18	2.58	2.41
Calcium	mg/L	N/A	728	497	497	538	551	488	532	519	489	-	416	498	451	-	523	533	499
Chloride	mg/L	N/A	1,770	485	485	511	507	503	505	526	543	-	427	435	465	-	472	436	434
Fluoride	mg/L	N/A	0.5	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND	ND	ND	ND	ND	ND	<0.130	0.0996J
pH, Field	SU	N/A	5.26-6.35	5.79	5.49	5.69	5.45	5.62	5.71	5.48	5.47	5.62	5.58	5.69	5.76	5.71	5.28	5.74	5.48
Sulfate	mg/L	N/A	3,320	2,210	2,310	2,290	2,250	2,290	2,330	2,380	2,500	-	2,110	2,140	2,250	-	2,190	2,050	2,380
Total Dissolved Solids	mg/L	N/A	8,180	4,130	4,140	4,150	4,120	4,130	3,930	4,130	4,000	-	4,270	4,080	4,010	-	3,780	4,040	4,200
Appendix IV																			
Antimony	mg/L	0.006	0.002	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	ND	-	-	-	ND	ND	<0.000378	<0.000378
Arsenic	mg/L	0.01	0.00100	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND	ND	ND	ND	ND	0.000628J	<0.000313
Barium	mg/L	2	0.183	0.02	0.03	0.02	0.02	0.01	0.01	0.01	0.02	ND	-	-	-	0.0137	0.0155	0.0144	0.0135
Beryllium	mg/L	0.004	0.00157	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	ND	ND	ND	ND	0.000436J	0.000204J
Cadmium	mg/L	0.005	0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND	ND	ND	ND	ND	ND	<0.000217	<0.000217
Chromium	mg/L	0.1	0.00248	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	<0.00153	<0.00153
Cobalt	mg/L	0.006	0.00174	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND	0.00109	ND	ND	ND	<0.000134	<0.000134
Radium-226/228	pCi/L	10.1	3.96	1.98	3.67	2.3	3	1.2	2.4	2.2	2.6	0.678	1.13	1.26	0.759	1.27	1.11	1.720	1.07
Fluoride	mg/L	4	0.5	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND	ND	ND	ND	ND	ND	<0.130	0.0996J
Lead	mg/L	0.015	0.0106	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	0.000276J	<0.000128
Lithium	mg/L	0.552	1.64	0.96	0.92	1.09	1.03	0.87	0.93	0.95	0.85	0.766	0.661	0.781	0.8	0.72	0.959	0.875	0.808
Mercury	mg/L	0.002	0.0002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	ND	ND	ND	ND	<0.000130	<0.000130
Molybdenum	mg/L	0.1	0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND	ND	ND	ND	ND	ND	<0.000610	<0.000610
Selenium	mg/L	0.05	0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	<0.00151	<0.00151
Thallium	mg/L	0.002	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	ND	-	-	-	ND	ND	0.000172J	<0.000148

Notes:
NTU - Nephelometric Turbiditiy Unit.
mV - milli Volt
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
pCi/L - picocuries per liter.
J - Value is below the Reporting Limit and above the Method Detection Limit; therfore, value is estimated and not considered significant.
MCL - Maximum Contaminant Level, EPA Drinking Water Standards and Health Advisories, April, 2012.
-- - not analyzed.
All metals were analyzed as total unless otherwise specified.

			Sample Location:	SSP MW-2															
			Compliance Phase:	Background								Initial A.M.		Assessment Monitoring					
			Sample Dates:	6/21/2016	8/23/2016	10/18/2016	12/20/2016	2/21/2017	5/3/2017	6/14/2017	8/24/2017	3/20/2018	6/9/2018	6/28/2019	1/15/2019	12/18/2019	6/17/2020	2/10/2021	7/13/2021
Constituent	Unit	MCL	Site BTV																
Field Parameters																			
pH	su	-	-	-	-	-	-	-	-	-	-	4.7	4.43	3.9	3.96	4.95	4.14	4.00	4.52
Conductivity	µS/cm	-	-	-	-	-	-	-	-	-	-	9,970	8,650	1,350	1,030	8,690	8,450	7,095	9,564
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	67.1	46.4	39.9	42.1	55.4	14.6	4.11	11.89
Dissolved Oxygen	mg/L	-	-	-	-	-	-	-	-	-	-	0	2.01	0.43	2.49	0.43	0.3	0.13	0.23
Temperature	°C	-	-	-	-	-	-	-	-	-	-	22.51	26.68	26.49	18.01	23.25	29.22	18.3	23.3
Oxidation Reduction Potential	mV	-	-	-	-	-	-	-	-	-	-	224	310	316	332	222	290	341.5	277.9
Appendix III																			
Boron	mg/L	N/A	1.490	0.8	0.6	0.6	0.53	0.47	0.5	0.46	0.45	-	ND	1.14	ND	-	1	0.81	0.585
Calcium	mg/L	N/A	728	742	838	931	925	818	899	872	811	-	881	658	756	-	822	728	867
Chloride	mg/L	N/A	1,770	2,070	2,470	2,610	2,550	2,550	2,520	2,640	2,790	-	2,560	1,640	2,500	-	2,650	1,810	2,300
Fluoride	mg/L	N/A	0.5	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	ND	ND	ND	2.56	0.622	ND	0.509	0.293J
pH, Field	SU	N/A	5.26-6.35	5.68	5.39	5.26	5.03	4.84	4.96	4.76	4.55	4.66	4.43	3.87	3.96	4.95	4.14	4	4.52
Sulfate	mg/L	N/A	3,320	2,030	2,070	2,080	1,970	2,080	2,080	2,120	2,070	-	2,170	2,300	2,030	-	2,610	2,250	2,090
Total Dissolved Solids	mg/L	N/A	8,180	6,690	7,070	7,370	6,990	6,990	5,960	6,940	6,910	-	6,630	6,100	6,790	-	5,850	6,120	6,410
Appendix IV																			
Antimony	mg/L	0.006	0.002	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	ND	-	-	-	ND	ND	<0.000378	<0.000378
Arsenic	mg/L	0.01	0.00100	<0.01	<0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.0303	ND	ND	0.00552	0.00918	0.00622	0.00643	0.00498
Barium	mg/L	2	0.183	0.39	0.04	0.06	0.14	0.03	0.06	0.03	0.06	ND	-	-	-	0.028	0.0261	0.0197	0.0497
Beryllium	mg/L	0.004	0.00157	0.009	0.006	0.016	0.025	0.026	0.03	0.03	0.04	0.231	0.0475	0.0713	0.0475	0.0587	0.0587	0.0704	0.0461
Cadmium	mg/L	0.005	0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND	ND	0.00689	ND	0.0046	0.0041	0.00446	0.00109
Chromium	mg/L	0.1	0.00248	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	<0.00153	<0.00153
Cobalt	mg/L	0.006	0.00174	0.06	0.05	0.07	0.07	0.06	0.06	0.06	0.06	0.0571	0.0539	0.19	0.0645	0.0922	0.0933	0.116	0.0539
Radium-226/228	pCi/L	10.1	3.96	2.79	3.11	1.9	1.7	14.6	2.100	2.3	4.3	1.7	2.11	1.62	2.27	2.3	2.13	2.33	3.36
Fluoride	mg/L	4	0.5	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	ND	ND	ND	2.56	0.622	ND	0.509	0.293J
Lead	mg/L	0.015	0.0106	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND	0.00539	0.00219	0.00304	0.00597	0.00227	0.00108
Lithium	mg/L	0.552	1.64	0.87	0.84	1.07	1.03	0.86	0.9	0.95	0.67	4.9	0.751	0.597	0.77	0.579	0.739	0.564	0.752
Mercury	mg/L	0.002	0.0002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	-	-	-	ND	ND	<0.000130	<0.000130
Molybdenum	mg/L	0.1	0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND	-	-	-	ND	ND	<0.000610	<0.000610
Selenium	mg/L	0.05	0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	0.025	ND	<0.00151	<0.00151
Thallium	mg/L	0.002	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	ND	ND	0.00112	ND	0.0013	ND	0.000516J	<0.000148

Notes:
NTU - Nephelometric Turbiditiy Unit.
mV - milli Volt
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
pCi/L - picocuries per liter.
J - Value is below the Reporting Limit and above the Method Detection Limit; therfore, value is estimated and not considered significant.
MCL - Maximum Contaminant Level, EPA Drinking Water Standards and Health Advisories, April, 2012.
-- - not analyzed.
All metals were analyzed as total unless otherwise specified.

			Sample Location:	SSP MW-3															
			Compliance Phase:	Background								Initial A.M.		Assessment Monitoring					
			Sample Dates:	6/21/2016	8/23/2016	10/18/2016	12/20/2016	2/21/2017	5/4/2017	6/13/2017	8/24/2017	3/21/2018	6/11/2018	6/27/2019	1/15/2019	12/18/2019	6/17/2020	2/9/2021	7/13/2021
Constituent	Unit	MCL	Site BTV																
Field Parameters																			
pH	su	-	-	-	-	-	-	-	-	-	-	4.3	4.29	4.3	4.15	4.73	3.6	4.29	4.18
Conductivity	µS/cm	-	-	-	-	-	-	-	-	-	-	8,670	7,490	8,520	8,980	8,510	7,870	6,797	8,264
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	49.1	44.8	7.7	19.1	20.1	42.6	6.50	2.87
Dissolved Oxygen	mg/L	-	-	-	-	-	-	-	-	-	-	0.09	0.67	0.42	17.22	1.99	3.99	0.06	0.03
Temperature	°C	-	-	-	-	-	-	-	-	-	-	21.91	28.11	26.99	20.45	22.81	25.61	17.5	23.3
Oxidation Reduction Potential	mV	-	-	-	-	-	-	-	-	-	-	282	323	272	323	299	331	301.3	274.4
Appendix III																			
Boron	mg/L	N/A	1.490	3.2	2.9	2.7	2.86	2.68	2.24	2.84	2.59	-	2.5	2.94	2.47	-	2.78	2.87	2.57
Calcium	mg/L	N/A	728	647	693	699	703	694	694	673	646	-	689	712	618	-	722	712	690
Chloride	mg/L	N/A	1,770	1,560	1,790	1,880	1,700	1,830	1,860	1,810	1,790	-	1,720	1,870	1,770	-	2,060	1,700	1,690
Fluoride	mg/L	N/A	0.5	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.8	ND	1.82	ND	2.72	0.551	ND	0.441J	0.466J
pH, Field	SU	N/A	5.26-6.35	4.4	4.3	4.31	4.16	4.45	4.34	4.16	4.20	4.26	4.29	4.25	4.15	4.73	3.6	4.29	4.18
Sulfate	mg/L	N/A	3,320	2,400	2,500	2,440	2,480	2,520	2,380	2,510	2,510	-	2,500	2,370	2,550	-	2,760	2,430	2,370
Total Dissolved Solids	mg/L	N/A	8,180	6,510	6,610	6,690	5,780	6,450	6,670	6,370	6,260	-	6,370	5,780	6,410	-	6,330	2,200	5,860
Appendix IV																			
Antimony	mg/L	0.006	0.002	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	ND	-	-	-	ND	ND	<0.000378	<0.000378
Arsenic	mg/L	0.01	0.00100	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	ND	ND	ND	0.00655	0.00314	0.00695	0.00831	0.0065
Barium	mg/L	2	0.183	0.03	0.05	0.04	0.09	0.03	0.03	0.02	0.03	ND	-	-	-	0.0192	0.0239	0.0218	0.0217
Beryllium	mg/L	0.004	0.00157	0.122	0.118	0.12	0.121	0.121	0.12	0.116	0.113	0.139	0.11	0.107	0.101	0.0992	0.105	0.12	0.104
Cadmium	mg/L	0.005	0.001	0.064	0.055	0.05	0.062	0.067	0.081	0.066	0.078	0.0686	0.0775	0.0711	0.0877	0.0788	0.0787	0.0736	0.0752
Chromium	mg/L	0.1	0.00248	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	0.0	0.00616	0.00575	0.0135
Cobalt	mg/L	0.006	0.00174	0.64	0.56	0.58	0.59	0.62	0.62	0.56	0.58	0.506	0.58	0.524	0.621	0.35	0.558	0.584	0.566
Radium-226/228	pCi/L	10.1	3.96	24.5	49.8	24.7	37	27.8	23.2	28.4	32.2	30.8	29.2	33.4	35.4	34.3	32	40.2	34.2
Fluoride	mg/L	4	0.5	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.8	ND	1.82	ND	2.72	0.551	ND	0.441J	0.466J
Lead	mg/L	0.015	0.0106	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	0.00652	ND	0.0044	0.00441	0.00519	0.00545	0.00533	0.00468
Lithium	mg/L	0.552	1.64	0.72	0.64	0.75	0.73	0.66	0.61	0.67	0.53	0.644	0.526	0.587	0.514	0.549	0.662	0.593	0.589
Mercury	mg/L	0.002	0.0002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	-	-	-	ND	ND	0.000162J	<0.000130
Molybdenum	mg/L	0.1	0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND	-	-	-	ND	ND	<0.000610	0.000667J
Selenium	mg/L	0.05	0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	0.00676	ND	<0.00151	<0.00151
Thallium	mg/L	0.002	0.001	0.009	0.008	0.01	0.01	0.01	0.01	0.01	0.008	0.00982	0.0097	0.0076	0.0112	0.00961	0.0102	0.0101	0.00971

Notes:
NTU - Nephelometric Turbiditiy Unit.
mV - milli Volt
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
pCi/L - picocuries per liter.
J - Value is below the Reporting Limit and above the Method Detection Limit; therfore, value is estimated and not considered significant.
MCL - Maximum Contaminant Level, EPA Drinking Water Standards and Health Advisories, April, 2012.
-- - not analyzed.
All metals were analyzed as total unless otherwise specified.

			Sample Location:	SSP MW-4															
			Compliance Phase:	Background								Initial A.M.		Assessment Monitoring					
			Sample Dates:	6/21/2016	8/23/2016	10/18/2016	12/20/2016	2/21/2017	5/4/2014	6/14/2017	8/24/2017	3/21/2018	6/11/2018	6/27/2019	1/15/2019	12/18/2019	6/17/2020	2/10/2021	7/13/2021
Constituent	Unit	MCL	Site BTV																
Field Parameters																			
pH	su	-	-	-	-	-	-	-	-	-	-	6.3	6.12	6.2	6.35	6.61	5.67	6.63	11.96
Conductivity	µS/cm	-	-	-	-	-	-	-	-	-	-	5,690	5,390	5,660	5,710	5,640	5,260	4,313	4,917
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	38.5	38.6	5.2	12.8	35.1	0	7.07	2.79
Dissolved Oxygen	mg/L	-	-	-	-	-	-	-	-	-	-	0.14	0.72	0.71	2.19	0.41	2.45	0.22	0.63
Temperature	°C	-	-	-	-	-	-	-	-	-	-	23.64	27.83	25.63	19.92	22.52	25.55	18.4	23.2
Oxidation Reduction Potential	mV	-	-	-	-	-	-	-	-	-	-	-25	5	139	32	81	41	18.5	-122.7
Appendix III																			
Boron	mg/L	N/A	1.490	1.3	1.3	1.31	1.28	1.24	1.47	1.31	1.15	-	1.35	1.51	ND	-	1.17	1.12	0.102
Calcium	mg/L	N/A	728	399	395	413	413	390	455	413	365	-	408	414	371	-	403	398	389
Chloride	mg/L	N/A	1,770	1,120	1,110	1,240	1,170	1,180	1,120	1,190	1,190	-	1,090	1,120	1,150	-	1,350	990	378
Fluoride	mg/L	N/A	0.5	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND	ND	ND	2.84	ND	ND	<0.130	0.227J
pH, Field	SU	N/A	5.26-6.35	6.38	6.12	6.26	5.78	5.95	6.26	6.26	6.05	6.26	6.12	6.15	6.35	6.61	5.67	6.63	11.96
Sulfate	mg/L	N/A	3,320	1,190	1,140	1,210	1,140	1,240	1,180	1,200	1,170	-	1,220	1,060	1,170	-	1,340	982	82
Total Dissolved Solids	mg/L	N/A	8,180	3,940	3,880	3,930	3,850	3,890	3,390	3,660	3,630	-	3,870	4,040	3,790	-	3,880	2,890	3,080
Appendix IV																			
Antimony	mg/L	0.006	0.002	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	ND	-	-	-	ND	ND	<0.000378	0.000415J
Arsenic	mg/L	0.01	0.00100	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND	ND	0.00203	ND	0.00103	0.000941J	0.000344J
Barium	mg/L	2	0.183	0.06	0.04	0.03	0.05	0.03	0.03	0.02	0.02	ND	-	-	-	0.0203	0.0273	0.027	0.103
Beryllium	mg/L	0.004	0.00157	<0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	ND	ND	ND	ND	ND	ND	<0.000182	<0.000182
Cadmium	mg/L	0.005	0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND	ND	ND	ND	ND	ND	<0.000217	<0.000217
Chromium	mg/L	0.1	0.00248	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	0.00762	0.00259	0.176
Cobalt	mg/L	0.006	0.00174	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.02	<0.02	ND	ND	ND	ND	ND	ND	0.000336J	<0.000134
Radium-226/228	pCi/L	10.1	3.96	5.38	6.82	2.3	3	3.5	4.4	3.2	2.7	3.19	2.77	2.02	2.82	3.07	2.6	1.62	1.46
Fluoride	mg/L	4	0.5	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND	ND	ND	2.84	ND	ND	<0.130	0.227J
Lead	mg/L	0.015	0.0106	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND	ND	ND	ND	ND	0.000161J	0.000276J
Lithium	mg/L	0.552	1.64	0.94	0.87	1.02	1	0.87	0.87	0.95	0.78	1.01	0.81	0.919	0.858	0.706	0.911	0.727	0.146
Mercury	mg/L	0.002	0.0002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	-	-	-	ND	ND	<0.000130	<0.000130
Molybdenum	mg/L	0.1	0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND	-	-	-	ND	ND	0.00321J	0.0629
Selenium	mg/L	0.05	0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	-	-	-	ND	ND	<0.00151	0.00441J
Thallium	mg/L	0.002	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	ND	ND	ND	ND	ND	ND	<0.000148	<0.000148

Notes:
NTU - Nephelometric Turbiditiy Unit.
mV - milli Volt
mg/L - milligrams per liter.
SU - standard units; pH is a field parameter.
pCi/L - picocuries per liter.
J - Value is below the Reporting Limit and above the Method Detection Limit; therfore, value is estimated and not considered significant.
MCL - Maximum Contaminant Level, EPA Drinking Water Standards and Health Advisories, April, 2012.
-- - not analyzed.
All metals were analyzed as total unless otherwise specified.

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Appendix D

Lab Reports

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eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-117061-1
Client Project/Site: Gibbons Creek Steam Electric Station

For:
HDR Inc
17111 Preston Road
Suite 200
Dallas, Texas 75248-1232

Attn: David Vogt

Authorized for release by:
3/25/2021 8:28:28 PM

Gail Lage, Senior Project Manager
(615)301-5741
Gail.Lage@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-117061-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-117061-1

Comments
No additional comments.

Receipt
The samples were received on 2/11/2021 11:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 1.6° C, 1.8° C, 2.3° C, 2.4° C and 3.2° C.

Receipt Exceptions
The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): SSP MW-3 (180-117062-1). The container labels list a sample collection date of 2/9/21, while the COC lists 2/10/21. The client confirmed the collection date on the chain 2/10 was correct.

RAD
Methods 903.0, 9315: Radium-226 batch 498981
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking
Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated
elsewhere in this narrative. Radiochemistry sample results are reported with the count
date/time applied as the Activity Reference Date. MNW-18 (180-117061-1), SSP/AP MW-1 (180-117061-2), SSP MW-3 (180-117062-1), FB-2 (180-117062-2), SSP MW-4 (180-117062-3), AP MW-3 (180-117062-4), AP MW-1D (180-117062-5), SFL MW-3 (180-117073-1), SFL MW-4 (180-117073-2), SFL MW-7 (180-117073-3), SFL MW-6 (180-117073-4), SSP MW-2 (180-117073-5), AP MW-5 (180-117074-1), AP MW-4 (180-117074-2), EQ-1 (180-117074-3), MNW-15 (180-117078-1), DUP-1 (180-117078-2), (LCS 160-498981/1-A), (LCSD 160-498981/2-A) and (MB 160-498981/23-A)

Methods 903.0, 9315: 903/9315 prep batch 499133
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
SFL MW-2 (180-117078-3), SFL MW-5 (180-117078-4), FB-1 (180-117078-5), (LCS 160-499133/1-A), (LCSD 160-499133/2-A) and (MB 160-499133/23-A)

Methods 904.0, 9320: Radium-228 prep batch 160-499136:
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. SFL MW-2 (180-117078-3), SFL MW-5 (180-117078-4), FB-1 (180-117078-5), (LCS 160-499136/1-A), (LCSD 160-499136/2-A) and (MB 160-499136/23-A)

Methods 904.0, 9320: <Insert Method> Prep Batch 160-498991
The Ra228 laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recovery (LCS-149% LCSD-129%) associated with the following sample(s) is outside the upper QC limit of (75-125) indicating a potential positive bias for that analyte. This analyte was not observed above the RL in the associated samples; therefore the sample data is not adversely affected by this excursion. The data have been reported with this narrative.

(LCS 160-498991/1-A) and (LCSD 160-498991/2-A)

Methods 904.0, 9320: 9320/904 PREP BATCH 498991
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
FB-2 (180-117062-2), EQ-1 (180-117074-3), MNW-15 (180-117078-1), DUP-1 (180-117078-2), (LCS 160-498991/1-A), (LCSD 160-498991/2-A) and (MB 160-498991/23-A)

Job ID: 180-117061-1 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

Method 904.0: Radium-228 Prep Batch 160-502060
The following sample did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interferences (samples were brown and cloudy). The data have been reported with this narrative.
SSP/AP MW-1 (180-117061-2) and SFL MW-6 (180-117073-4)

Method 904.0: Radium-228 batch 502088
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking
Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated
elsewhere in this narrative. Radiochemistry sample results are reported with the count
date/time applied as the Activity Reference Date. MNW-18 (180-117061-1), SSP/AP MW-1 (180-117061-2), SSP MW-3 (180-117062-1), SSP MW-4 (180-117062-3), AP MW-3 (180-117062-4), AP MW-1D (180-117062-5), SFL MW-3 (180-117073-1), SFL MW-4 (180-117073-2), SFL MW-7 (180-117073-3), SFL MW-6 (180-117073-4), SSP MW-2 (180-117073-5), AP MW-5 (180-117074-1), AP MW-4 (180-117074-2), (LCS 160-502088/1-A), (LCSD 160-502088/2-A) and (MB 160-502088/16-A)

Method PrecSep_0: Radium 226 Prep Batch 160-498991:
Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 160-498991 and 160-498991.

Method PrecSep_0: Radium 228 Prep Batch 160-498991:
The following samples were prepared at a reduced aliquot: SSP/AP MW-1 (180-117061-2), SSP MW-3 (180-117062-1), AP MW-3 (180-117062-4), AP MW-1D (180-117062-5), SFL MW-3 (180-117073-1), SFL MW-6 (180-117073-4), SSP MW-2 (180-117073-5), AP MW-5 (180-117074-1) and AP MW-4 (180-117074-2). Samples 180-117061-2, 180-117073-4, and 180-117074-1 contained brown discoloration and a cloudy appearance. Sample 180-117062-1 contained yellow discoloration and a cloudy appearance. Sample 180-117062-4 contained a cloudy appearance and a noticeable sediment level. Samples 180-117062-5 and 180-117073-1 contained yellow discoloration. Sample 180-117093-5 contained a cloudy appearance.

A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

During the in-growth process, the following samples needed to be filtered due to sediment present in the sample. This is an indicator of matrix interference. 180-117062-1, 180-117073-2, 180-117073-3, 180-117073-4, 180-117073-5, 180-117074-1 and 180-117074-2.

Method PrecSep_0: Radium 228 Prep Batch 160-499136:
Insufficient sample volume was available to perform a sample duplicate for the following samples: SFL MW-2 (180-117078-3), SFL MW-5 (180-117078-4) and FB-1 (180-117078-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: Radium 228 Prep Batch 160-502088:
Insufficient sample volume was available to perform a sample duplicate for the following samples: MNW-18 (180-117061-1), SSP/AP MW-1 (180-117061-2), SSP MW-3 (180-117062-1), SSP MW-4 (180-117062-3), AP MW-3 (180-117062-4), AP MW-1D (180-117062-5), SFL MW-3 (180-117073-1), SFL MW-4 (180-117073-2), SFL MW-7 (180-117073-3), SFL MW-6 (180-117073-4), SSP MW-2 (180-117073-5), AP MW-5 (180-117074-1) and AP MW-4 (180-117074-2). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: Radium 228 Prep Batch 160-502088:
The following sample(s) were prepared at a reduced aliquot due to re-analysis of the sample(s): MNW-18 (180-117061-1), SSP/AP MW-1 (180-117061-2), SSP MW-3 (180-117062-1), SSP MW-4 (180-117062-3), AP MW-3 (180-117062-4), AP MW-1D (180-117062-5), SFL MW-3

Job ID: 180-117061-1 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

(180-117073-1), SFL MW-4 (180-117073-2), SFL MW-7 (180-117073-3), SFL MW-6 (180-117073-4), SSP MW-2 (180-117073-5), AP MW-5 (180-117074-1) and AP MW-4 (180-117074-2). The following samples also had matrix which could indicate matrix interference: 180-117061-2 was brown and cloudy; 180-117062-1 was yellow and cloudy; 180-117062-4, 180-117073-4, and 180-117074-1 were cloudy.

Method PrecSep-21: Radium 226 Prep Batch 160-498981:
Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 160-498981.

Method PrecSep-21: Radium 226 Prep Batch 160-498981:
The following samples were prepared at a reduced aliquot: SSP/AP MW-1 (180-117061-2), SSP MW-3 (180-117062-1), AP MW-3 (180-117062-4), AP MW-1D (180-117062-5), SFL MW-3 (180-117073-1), SFL MW-6 (180-117073-4), SSP MW-2 (180-117073-5), AP MW-5 (180-117074-1) and AP MW-4 (180-117074-2). Samples 180-117061-2, 180-117073-4, and 180-117074-1 contained brown discoloration and a cloudy appearance. Sample 180-117062-1 contained yellow discoloration and a cloudy appearance. Sample 180-117062-4 contained a cloudy appearance and a noticeable sediment level. Samples 180-117062-5 and 180-117073-1 contained yellow discoloration. Sample 180-117093-5 contained a cloudy appearance. Sample 180-117074-2 contained a noticeable sediment level. Sample 160-41246-1 contained yellow discoloration and a heavy orange sediment level.

A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

During the in-growth process, the following samples needed to be filtered due to sediment present in the sample. This is an indicator of matrix interference. 180-117062-1, 180-117073-2, 180-117073-3, 180-117073-4, 180-117073-5, 180-117074-1 and 180-117074-2.

Method PrecSep-21: Radium 226 Prep Batch 160-499133:
Insufficient sample volume was available to perform a sample duplicate for the following samples: SFL MW-2 (180-117078-3), SFL MW-5 (180-117078-4) and FB-1 (180-117078-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Narrative

Job Narrative
180-117061-2

Receipt
The samples were received on 2/11/2021 11:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 1.6° C, 1.8° C, 2.3° C, 2.4° C and 3.2° C.

Receipt Exceptions
The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): SSP MW-3 (180-117062-1). The container labels list a sample collection date of 2/9/21, while the COC lists 2/10/21. The client confirmed the collection date on the chain 2/10 was correct.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method 6020B: The following samples were diluted due to the nature of the sample matrix: SSP MW-3 (180-117062-1), AP MW-3 (180-117062-4) and AP MW-1D (180-117062-5). Elevated reporting limits (RLs) are provided.

Method 6020B: The following sample was diluted due to the nature of the sample matrix: SFL MW-5 (180-117078-4). Elevated reporting limits (RLs) are provided.

Method 6020B: The following samples were diluted due to the nature of the sample matrix or to bring the concentration of boron to with in

Job ID: 180-117061-1 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

the instrument's linear range: AP MW-5 (180-117074-1), MNW-15 (180-117078-1), (180-117074-E-1-C MS ^2), (180-117074-E-1-D MSD ^2) and (180-117074-E-1-B SD ^10). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21
California	State	2891	04-30-21
Connecticut	State	PH-0688	09-30-20 *
Florida	NELAP	E871008	06-30-21
Georgia	State	PA 02-00416	04-30-21
Illinois	NELAP	004375	06-30-21
Kansas	NELAP	E-10350	01-31-22
Kentucky (UST)	State	162013	04-30-21
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	06-30-21
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20 *
Nevada	State	PA00164	07-31-21
New Hampshire	NELAP	2030	04-05-21
New Jersey	NELAP	PA005	06-30-21
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	04-30-21
Oregon	NELAP	PA-2151	02-06-22
Pennsylvania	NELAP	02-00416	04-30-21
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	04-30-21
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-21
Virginia	NELAP	10043	09-14-21
West Virginia DEP	State	142	01-31-22
Wisconsin	State	998027800	08-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-21
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21
Kentucky (DW)	State	KY90125	01-01-22
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-21
Texas	NELAP	T104704193-19-13	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

Sample Summary

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-117061-1	MNW-18	Water	02/09/21 10:55	02/11/21 11:00	
180-117061-2	SSP/AP MW-1	Water	02/09/21 09:30	02/11/21 11:00	
180-117062-1	SSP MW-3	Water	02/10/21 10:55	02/11/21 11:00	
180-117062-2	FB-2	Water	02/10/21 10:55	02/11/21 11:00	
180-117062-3	SSP MW-4	Water	02/10/21 12:00	02/11/21 11:00	
180-117062-4	AP MW-3	Water	02/10/21 13:05	02/11/21 11:00	
180-117062-5	AP MW-1D	Water	02/10/21 13:55	02/11/21 11:00	
180-117073-1	SFL MW-3	Water	02/10/21 07:40	02/11/21 11:00	
180-117073-2	SFL MW-4	Water	02/10/21 06:30	02/11/21 11:00	
180-117073-3	SFL MW-7	Water	02/10/21 06:40	02/11/21 11:00	
180-117073-4	SFL MW-6	Water	02/09/21 12:45	02/11/21 11:00	
180-117073-5	SSP MW-2	Water	02/10/21 09:55	02/11/21 11:00	
180-117074-1	AP MW-5	Water	02/10/21 14:40	02/11/21 11:00	
180-117074-2	AP MW-4	Water	02/10/21 15:28	02/11/21 11:00	
180-117074-3	EQ-1	Water	02/10/21 16:00	02/11/21 11:00	
180-117078-1	MNW-15	Water	02/09/21 15:55	02/11/21 11:00	
180-117078-2	DUP-1	Water	02/09/21 18:10	02/11/21 11:00	
180-117078-3	SFL MW-2	Water	02/09/21 14:45	02/11/21 11:00	
180-117078-4	SFL MW-5	Water	02/09/21 13:55	02/11/21 11:00	
180-117078-5	FB-1	Water	02/09/21 13:45	02/11/21 11:00	

Method Summary

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	TAL SL
904.0	Radium-228 (GFPC)	EPA	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

EPA = US Environmental Protection Agency
None = None
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Lab Chronicle

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: MNW-18
Lab Sample ID: 180-117061-1
Date Collected: 02/09/21 10:55
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		2.5			346770	02/17/21 23:36	EPS	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		25			346770	02/17/21 23:57	EPS	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	346914	02/18/21 05:36	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347383	02/19/21 20:13	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	346914	02/18/21 05:36	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347575	02/24/21 12:19	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	346437	02/12/21 13:22	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347409	02/23/21 10:56	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	346611	02/15/21 15:28	GRB	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			1000.40 mL	1.0 g	498981	02/17/21 12:19	KMP	TAL SL
Total/NA	Analysis	903.0		1			501647	03/12/21 10:47	ANW	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			750.49 mL	1.0 g	502088	03/16/21 16:48	JEC	TAL SL
Total/NA	Analysis	904.0		1			502708	03/22/21 13:03	AK	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SSP/AP MW-1
Lab Sample ID: 180-117061-2
Date Collected: 02/09/21 09:30
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		5			346770	02/17/21 22:12	EPS	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		50			346770	02/17/21 22:33	EPS	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	346914	02/18/21 05:36	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347383	02/19/21 20:16	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	346914	02/18/21 05:36	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347575	02/24/21 12:33	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	346437	02/12/21 13:22	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347409	02/23/21 10:57	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	346611	02/15/21 15:28	GRB	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSP/AP MW-1
Lab Sample ID: 180-117061-2
Date Collected: 02/09/21 09:30
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			499.24 mL	1.0 g	498981	02/17/21 12:19	KMP	TAL SL
Total/NA	Analysis	903.0		1			501647	03/12/21 10:47	ANW	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			500.84 mL	1.0 g	502088	03/16/21 16:48	JEC	TAL SL
Total/NA	Analysis	904.0		1			502708	03/22/21 13:03	AK	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SSP MW-3
Lab Sample ID: 180-117062-1
Date Collected: 02/10/21 10:55
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		5			346770	02/17/21 19:26	EPS	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		50			346770	02/17/21 19:46	EPS	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	346914	02/18/21 05:36	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347383	02/19/21 20:31	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	346914	02/18/21 05:36	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		2			347575	02/24/21 12:41	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	346437	02/12/21 13:22	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347409	02/23/21 10:58	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	346881	02/17/21 14:56	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			750.49 mL	1.0 g	498981	02/17/21 12:19	KMP	TAL SL
Total/NA	Analysis	903.0		1			501647	03/12/21 10:44	ANW	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			500.17 mL	1.0 g	502088	03/16/21 16:48	JEC	TAL SL
Total/NA	Analysis	904.0		1			502708	03/22/21 13:03	AK	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: FB-2
Lab Sample ID: 180-117062-2
Date Collected: 02/10/21 10:55
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1			346770	02/17/21 21:52	EPS	TAL PIT
	Instrument ID: INTEGRION									

Client Sample ID: FB-2
Lab Sample ID: 180-117062-2
Date Collected: 02/10/21 10:55
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	346914	02/18/21 05:36	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347383	02/19/21 20:52	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	346914	02/18/21 05:36	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347575	02/24/21 12:44	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	346437	02/12/21 13:22	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347409	02/23/21 10:59	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	346881	02/17/21 14:56	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			1000.31 mL	1.0 g	498981	02/17/21 12:19	KMP	TAL SL
Total/NA	Analysis	903.0		1			501647	03/12/21 10:45	ANW	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.31 mL	1.0 g	498991	02/17/21 14:48	KMP	TAL SL
Total/NA	Analysis	904.0		1	1.0 mL	1.0 mL	500442	03/02/21 09:04	AK	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SSP MW-4
Lab Sample ID: 180-117062-3
Date Collected: 02/10/21 12:00
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		5			346770	02/17/21 22:54	EPS	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		50			346770	02/17/21 23:15	EPS	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	346914	02/18/21 05:36	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347383	02/19/21 20:56	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	346914	02/18/21 05:36	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347575	02/24/21 12:48	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	346437	02/12/21 13:22	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347409	02/23/21 11:00	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	346881	02/17/21 14:56	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			999.74 mL	1.0 g	498981	02/17/21 12:19	KMP	TAL SL
Total/NA	Analysis	903.0		1			501647	03/12/21 10:45	ANW	TAL SL
	Instrument ID: GFPCBLUE									

Client Sample ID: SSP MW-4
Lab Sample ID: 180-117062-3
Date Collected: 02/10/21 12:00
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			750.06 mL	1.0 g	502088	03/16/21 16:48	JEC	TAL SL
Total/NA	Analysis	904.0		1			502708	03/22/21 13:04	AK	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP MW-3
Lab Sample ID: 180-117062-4
Date Collected: 02/10/21 13:05
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1			346770	02/18/21 00:18	EPS	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		10			346770	02/18/21 00:38	EPS	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	346914	02/18/21 05:36	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347383	02/19/21 21:00	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	346914	02/18/21 05:36	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		2			347575	02/24/21 12:51	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	346437	02/12/21 13:22	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347409	02/23/21 11:01	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	346881	02/17/21 14:56	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			750.23 mL	1.0 g	498981	02/17/21 12:19	KMP	TAL SL
Total/NA	Analysis	903.0		1			501647	03/12/21 10:45	ANW	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			750.67 mL	1.0 g	502088	03/16/21 16:48	JEC	TAL SL
Total/NA	Analysis	904.0		1			502708	03/22/21 13:04	AK	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP MW-1D
Lab Sample ID: 180-117062-5
Date Collected: 02/10/21 13:55
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			750.06 mL	1.0 g	502088	03/16/21 16:48	JEC	TAL SL
Total/NA	Analysis	904.0		1			502708	03/22/21 13:04	AK	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP MW-1D
Lab Sample ID: 180-117062-5
Date Collected: 02/10/21 13:55
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	346914	02/18/21 05:36	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347383	02/19/21 21:14	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	346914	02/18/21 05:36	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		5			347575	02/24/21 12:55	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	346437	02/12/21 13:22	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347409	02/23/21 11:02	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	346881	02/17/21 14:56	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			750.24 mL	1.0 g	498981	02/17/21 12:19	KMP	TAL SL
Total/NA	Analysis	903.0		1			501646	03/12/21 10:51	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			750.47 mL	1.0 g	502088	03/16/21 16:48	JEC	TAL SL
Total/NA	Analysis	904.0		1			502708	03/22/21 13:04	AK	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SFL MW-3
Lab Sample ID: 180-117073-1
Date Collected: 02/10/21 07:40
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		5			346554	02/16/21 01:49	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		50			346554	02/16/21 02:10	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	346793	02/17/21 07:43	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347047	02/18/21 13:27	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	347430	02/23/21 14:39	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347536	02/24/21 11:44	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	346881	02/17/21 14:56	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			750.13 mL	1.0 g	498981	02/17/21 12:19	KMP	TAL SL
Total/NA	Analysis	903.0		1			501646	03/12/21 10:51	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			750.33 mL	1.0 g	502088	03/16/21 16:48	JEC	TAL SL
Total/NA	Analysis	904.0		1			502708	03/22/21 13:04	AK	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SFL MW-4 — **Lab Sample ID: 180-117073-2**
Date Collected: 02/10/21 06:30 — **Matrix: Water**
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		5			346554	02/16/21 00:26	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		50			346554	02/16/21 00:47	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	346793	02/17/21 07:43	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347047	02/18/21 13:38	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	347430	02/23/21 14:39	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347536	02/24/21 11:45	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	346881	02/17/21 14:56	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			999.57 mL	1.0 g	498981	02/17/21 12:19	KMP	TAL SL
Total/NA	Analysis	903.0		1			501646	03/12/21 10:52	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			750.89 mL	1.0 g	502088	03/16/21 16:48	JEC	TAL SL
Total/NA	Analysis	904.0		1			502708	03/22/21 13:05	AK	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SFL MW-7 — **Lab Sample ID: 180-117073-3**
Date Collected: 02/10/21 06:40 — **Matrix: Water**
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		5			346554	02/15/21 19:34	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		50			346554	02/15/21 19:55	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	346793	02/17/21 07:43	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347047	02/18/21 13:41	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	347430	02/23/21 14:39	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347536	02/24/21 11:46	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	346881	02/17/21 14:56	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			1000.26 mL	1.0 g	498981	02/17/21 12:19	KMP	TAL SL
Total/NA	Analysis	903.0		1			501646	03/12/21 10:52	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			750.60 mL	1.0 g	502088	03/16/21 16:48	JEC	TAL SL
Total/NA	Analysis	904.0		1			502708	03/22/21 13:05	AK	TAL SL
	Instrument ID: GFPCORANGE									

Client Sample ID: SFL MW-7 — **Lab Sample ID: 180-117073-3**
Date Collected: 02/10/21 06:40 — **Matrix: Water**
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL

Client Sample ID: SFL MW-6 — **Lab Sample ID: 180-117073-4**
Date Collected: 02/09/21 12:45 — **Matrix: Water**
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		10			346554	02/15/21 15:03	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		100			346554	02/15/21 15:23	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	346793	02/17/21 07:43	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347047	02/18/21 13:45	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	347430	02/23/21 14:39	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347536	02/24/21 11:48	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	346611	02/15/21 15:28	GRB	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			500.36 mL	1.0 g	498981	02/17/21 12:19	KMP	TAL SL
Total/NA	Analysis	903.0		1			501646	03/12/21 10:53	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			500.61 mL	1.0 g	502088	03/16/21 16:48	JEC	TAL SL
Total/NA	Analysis	904.0		1			502708	03/22/21 13:05	AK	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SSP MW-2 — **Lab Sample ID: 180-117073-5**
Date Collected: 02/10/21 09:55 — **Matrix: Water**
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		5			346554	02/15/21 23:44	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		50			346554	02/16/21 00:05	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	346794	02/17/21 07:45	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347047	02/18/21 18:09	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	347430	02/23/21 14:39	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347536	02/24/21 11:49	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	346881	02/17/21 14:56	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSP MW-2
Lab Sample ID: 180-117073-5
Date Collected: 02/10/21 09:55
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			749.17 mL	1.0 g	498981	02/17/21 12:19	KMP	TAL SL
Total/NA	Analysis	903.0		1			501646	03/12/21 10:53	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			750.23 mL	1.0 g	502088	03/16/21 16:48	JEC	TAL SL
Total/NA	Analysis	904.0		1			502708	03/22/21 13:36	AK	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP MW-5
Lab Sample ID: 180-117074-1
Date Collected: 02/10/21 14:40
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		2.5			346554	02/16/21 02:31	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		25			346554	02/16/21 02:52	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	346981	02/18/21 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347383	02/19/21 21:43	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	346981	02/18/21 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		2			347908	02/27/21 11:19	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	346437	02/12/21 13:22	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347409	02/23/21 11:06	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	346881	02/17/21 14:56	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			499.58 mL	1.0 g	498981	02/17/21 12:19	KMP	TAL SL
Total/NA	Analysis	903.0		1			501646	03/12/21 10:54	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			500.01 mL	1.0 g	502088	03/16/21 16:48	JEC	TAL SL
Total/NA	Analysis	904.0		1			502687	03/22/21 13:10	ANW	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP MW-4
Lab Sample ID: 180-117074-2
Date Collected: 02/10/21 15:28
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		5			346554	02/15/21 20:15	SAT	TAL PIT
	Instrument ID: INTEGRION									

Client Sample ID: AP MW-4
Lab Sample ID: 180-117074-2
Date Collected: 02/10/21 15:28
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		50			346554	02/15/21 20:36	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	346981	02/18/21 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347383	02/19/21 22:16	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	346981	02/18/21 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347908	02/27/21 11:29	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	346437	02/12/21 13:22	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347409	02/23/21 11:09	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	346881	02/17/21 14:56	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			749.29 mL	1.0 g	498981	02/17/21 12:19	KMP	TAL SL
Total/NA	Analysis	903.0		1			501646	03/12/21 10:54	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			750.32 mL	1.0 g	502088	03/16/21 16:48	JEC	TAL SL
Total/NA	Analysis	904.0		1			502687	03/22/21 13:10	ANW	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: EQ-1
Lab Sample ID: 180-117074-3
Date Collected: 02/10/21 16:00
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1			346554	02/15/21 21:39	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	346981	02/18/21 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347383	02/19/21 22:19	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	346981	02/18/21 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347908	02/27/21 11:32	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	346437	02/12/21 13:22	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347409	02/23/21 11:10	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	346883	02/17/21 14:59	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			1000.92 mL	1.0 g	498981	02/17/21 12:19	KMP	TAL SL
Total/NA	Analysis	903.0		1			501646	03/12/21 10:54	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.92 mL	1.0 g	498991	02/17/21 14:48	KMP	TAL SL
Total/NA	Analysis	904.0		1	1.0 mL	1.0 mL	500442	03/02/21 09:06	AK	TAL SL
	Instrument ID: GFPCBLUE									

Client Sample ID: EQ-1 — **Lab Sample ID: 180-117074-3**
Date Collected: 02/10/21 16:00 — **Matrix: Water**
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL

Client Sample ID: MNW-15 — **Lab Sample ID: 180-117078-1**
Date Collected: 02/09/21 15:55 — **Matrix: Water**
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		5			346554	02/16/21 05:39	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		50			346554	02/16/21 06:00	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	346981	02/18/21 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347383	02/19/21 22:23	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	346981	02/18/21 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		5			347908	02/27/21 11:35	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			50 mL	50 mL	347430	02/23/21 14:39	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347536	02/24/21 11:53	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	346611	02/15/21 15:28	GRB	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			1000.54 mL	1.0 g	498981	02/17/21 12:19	KMP	TAL SL
Total/NA	Analysis	903.0		1			501646	03/12/21 10:54	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.54 mL	1.0 g	498991	02/17/21 14:48	KMP	TAL SL
Total/NA	Analysis	904.0		1	1.0 mL	1.0 mL	500432	03/02/21 09:08	AK	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-1 — **Lab Sample ID: 180-117078-2**
Date Collected: 02/09/21 18:10 — **Matrix: Water**
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		5			346554	02/16/21 06:20	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		50			346554	02/16/21 06:41	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	346981	02/18/21 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347383	02/19/21 22:26	RSK	TAL PIT
	Instrument ID: A									

Client Sample ID: DUP-1 — **Lab Sample ID: 180-117078-2**
Date Collected: 02/09/21 18:10 — **Matrix: Water**
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	346981	02/18/21 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		5			347728	02/25/21 14:34	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	347430	02/23/21 14:39	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347536	02/24/21 11:54	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	346611	02/15/21 15:28	GRB	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			999.25 mL	1.0 g	498981	02/17/21 12:19	KMP	TAL SL
Total/NA	Analysis	903.0		1			501646	03/12/21 10:55	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			999.25 mL	1.0 g	498991	02/17/21 14:48	KMP	TAL SL
Total/NA	Analysis	904.0		1	1.0 mL	1.0 mL	500432	03/02/21 09:08	AK	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			502961	03/24/21 11:42	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SFL MW-2 — **Lab Sample ID: 180-117078-3**
Date Collected: 02/09/21 14:45 — **Matrix: Water**
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		5			346554	02/15/21 23:02	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		50			346554	02/15/21 23:23	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	346981	02/18/21 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347383	02/19/21 22:30	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	346981	02/18/21 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347728	02/25/21 14:38	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	347430	02/23/21 14:39	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347536	02/24/21 11:55	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	346611	02/15/21 15:28	GRB	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			1000.38 mL	1.0 g	499133	02/18/21 09:54	KMP	TAL SL
Total/NA	Analysis	903.0		1			501661	03/15/21 16:55	AK	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.38 mL	1.0 g	499136	02/18/21 10:43	KMP	TAL SL
Total/NA	Analysis	904.0		1			500745	03/04/21 08:28	SCB	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			502274	03/17/21 15:15	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SFL MW-5
Lab Sample ID: 180-117078-4
Date Collected: 02/09/21 13:55
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		10			346554	02/15/21 22:21	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 9056A		100			346554	02/15/21 22:42	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	346981	02/18/21 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347383	02/19/21 22:44	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	346981	02/18/21 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		2			347728	02/25/21 14:52	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	347430	02/23/21 14:39	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347536	02/24/21 11:56	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	346611	02/15/21 15:28	GRB	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			1000.28 mL	1.0 g	499133	02/18/21 09:54	KMP	TAL SL
Total/NA	Analysis	903.0		1			501661	03/15/21 16:55	AK	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.28 mL	1.0 g	499136	02/18/21 10:43	KMP	TAL SL
Total/NA	Analysis	904.0		1			500745	03/04/21 08:28	SCB	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			502274	03/17/21 15:15	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: FB-1
Lab Sample ID: 180-117078-5
Date Collected: 02/09/21 13:45
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1			346554	02/15/21 22:00	SAT	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	346981	02/18/21 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347383	02/19/21 23:06	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	346981	02/18/21 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347728	02/25/21 14:56	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	347430	02/23/21 14:39	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347536	02/24/21 11:57	KHM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	346611	02/15/21 15:28	GRB	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Prep	PrecSep-21			1000.66 mL	1.0 g	499133	02/18/21 09:54	KMP	TAL SL
Total/NA	Analysis	903.0		1			501661	03/15/21 16:56	AK	TAL SL
	Instrument ID: GFPCPURPLE									

Client Sample ID: FB-1
Lab Sample ID: 180-117078-5
Date Collected: 02/09/21 13:45
Matrix: Water
Date Received: 02/11/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.66 mL	1.0 g	499136	02/18/21 10:43	KMP	TAL SL
Total/NA	Analysis	904.0		1			500745	03/04/21 08:29	SCB	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			502274	03/17/21 15:15	SCB	TAL SL
	Instrument ID: NOEQUIP									

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Analyst References:

Lab: TAL PIT

Batch Type: Prep

KEM = Kimberly Mahoney
KHM = Kyle Mucroski
RJR = Ron Rosenbaum

Batch Type: Analysis

EPS = Evan Scheuer
GRB = Gabriel Berghe
KHM = Kyle Mucroski
KMM = Kendric Moore
RJR = Ron Rosenbaum
RSK = Robert Kurtz
SAT = Stephen Tallam

Lab: TAL SL

Batch Type: Prep

JEC = Julia Crossen
KMP = Karen Phillips

Batch Type: Analysis

AK = Amanda Kraus
ANW = Aamber Woods
FLC = Fernando Cruz
SCB = Sarah Bernsen

Client Sample ID: MNW-18
Lab Sample ID: 180-117061-1
Date Collected: 02/09/21 10:55
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	369		2.50	1.78	mg/L			02/17/21 23:36	2.5
Fluoride	0.120	J	0.250	0.0650	mg/L			02/17/21 23:36	2.5
Sulfate	1300		25.0	18.9	mg/L			02/17/21 23:57	25

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00255		0.00100	0.000313	mg/L		02/18/21 05:36	02/19/21 20:13	1
Barium	0.0467		0.0100	0.00160	mg/L		02/18/21 05:36	02/19/21 20:13	1
Beryllium	0.000184	J	0.00100	0.000182	mg/L		02/18/21 05:36	02/19/21 20:13	1
Boron	0.422		0.0800	0.0386	mg/L		02/18/21 05:36	02/24/21 12:19	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		02/18/21 05:36	02/19/21 20:13	1
Calcium	299		0.500	0.127	mg/L		02/18/21 05:36	02/19/21 20:13	1
Chromium	0.00249		0.00200	0.00153	mg/L		02/18/21 05:36	02/19/21 20:13	1
Cobalt	0.00226		0.000500	0.000134	mg/L		02/18/21 05:36	02/19/21 20:13	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		02/18/21 05:36	02/19/21 20:13	1
Lead	<0.000128		0.00100	0.000128	mg/L		02/18/21 05:36	02/19/21 20:13	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/18/21 05:36	02/19/21 20:13	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/18/21 05:36	02/19/21 20:13	1
Thallium	<0.000148		0.00100	0.000148	mg/L		02/18/21 05:36	02/19/21 20:13	1
Lithium	0.332		0.00500	0.00339	mg/L		02/18/21 05:36	02/19/21 20:13	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/12/21 13:22	02/23/21 10:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2080		20.0	20.0	mg/L			02/15/21 15:28	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.81		0.246	0.295	1.00	0.128	pCi/L	02/17/21 12:19	03/12/21 10:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.5*		*40 - 110*	*02/17/21 12:19*	*03/12/21 10:47*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.80		0.505	0.567	1.00	0.483	pCi/L	03/16/21 16:48	03/22/21 13:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.6*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:03*	*1*
Y Carrier	*81.9*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:03*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: MNW-18
Lab Sample ID: 180-117061-1
Date Collected: 02/09/21 10:55
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	4.61		0.562	0.639	5.00	0.483	pCi/L		03/24/21 11:42	1

Client Sample ID: SSP/AP MW-1
Lab Sample ID: 180-117061-2
Date Collected: 02/09/21 09:30
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1520		50.0	35.7	mg/L			02/17/21 22:33	50
Fluoride	<0.130		0.500	0.130	mg/L			02/17/21 22:12	5
Sulfate	2920		50.0	37.8	mg/L			02/17/21 22:33	50

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00501		0.00100	0.000313	mg/L		02/18/21 05:36	02/19/21 20:16	1
Barium	0.184		0.0100	0.00160	mg/L		02/18/21 05:36	02/19/21 20:16	1
Beryllium	0.00157		0.00100	0.000182	mg/L		02/18/21 05:36	02/19/21 20:16	1
Boron	0.690		0.0800	0.0386	mg/L		02/18/21 05:36	02/24/21 12:33	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		02/18/21 05:36	02/19/21 20:16	1
Calcium	667		0.500	0.127	mg/L		02/18/21 05:36	02/19/21 20:16	1
Chromium	0.00248		0.00200	0.00153	mg/L		02/18/21 05:36	02/19/21 20:16	1
Cobalt	0.00174		0.000500	0.000134	mg/L		02/18/21 05:36	02/19/21 20:16	1
Molybdenum	0.00199	J	0.00500	0.000610	mg/L		02/18/21 05:36	02/19/21 20:16	1
Lead	0.0106		0.00100	0.000128	mg/L		02/18/21 05:36	02/19/21 20:16	1
Antimony	0.000721	J B	0.00200	0.000378	mg/L		02/18/21 05:36	02/19/21 20:16	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/18/21 05:36	02/19/21 20:16	1
Thallium	0.000206	J	0.00100	0.000148	mg/L		02/18/21 05:36	02/19/21 20:16	1
Lithium	1.23		0.00500	0.00339	mg/L		02/18/21 05:36	02/19/21 20:16	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/12/21 13:22	02/23/21 10:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5630		40.0	40.0	mg/L			02/15/21 15:28	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.14		0.310	0.327	1.00	0.303	pCi/L	02/17/21 12:19	03/12/21 10:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.9*		*40 - 110*	*02/17/21 12:19*	*03/12/21 10:47*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.24	G	0.823	0.849	1.00	1.14	pCi/L	03/16/21 16:48	03/22/21 13:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.3*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:03*	*1*
Y Carrier	*76.6*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:03*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: SSP/AP MW-1
Lab Sample ID: 180-117061-2
Date Collected: 02/09/21 09:30
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	3.38		0.879	0.910	5.00	1.14	pCi/L		03/24/21 11:42	1

Client Sample ID: SSP MW-3
Lab Sample ID: 180-117062-1
Date Collected: 02/10/21 10:55
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1700		50.0	35.7	mg/L			02/17/21 19:46	50
Fluoride	0.441	J	0.500	0.130	mg/L			02/17/21 19:26	5
Sulfate	2430		50.0	37.8	mg/L			02/17/21 19:46	50

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00831		0.00100	0.000313	mg/L		02/18/21 05:36	02/19/21 20:31	1
Barium	0.0218		0.0100	0.00160	mg/L		02/18/21 05:36	02/19/21 20:31	1
Beryllium	0.120		0.00100	0.000182	mg/L		02/18/21 05:36	02/19/21 20:31	1
Boron	2.87		0.160	0.0772	mg/L		02/18/21 05:36	02/24/21 12:41	2
Cadmium	0.0736		0.00100	0.000217	mg/L		02/18/21 05:36	02/19/21 20:31	1
Calcium	712		0.500	0.127	mg/L		02/18/21 05:36	02/19/21 20:31	1
Chromium	0.00575		0.00200	0.00153	mg/L		02/18/21 05:36	02/19/21 20:31	1
Cobalt	0.584		0.000500	0.000134	mg/L		02/18/21 05:36	02/19/21 20:31	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		02/18/21 05:36	02/19/21 20:31	1
Lead	0.00533		0.00100	0.000128	mg/L		02/18/21 05:36	02/19/21 20:31	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/18/21 05:36	02/19/21 20:31	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/18/21 05:36	02/19/21 20:31	1
Thallium	0.0101		0.00100	0.000148	mg/L		02/18/21 05:36	02/19/21 20:31	1
Lithium	0.593		0.00500	0.00339	mg/L		02/18/21 05:36	02/19/21 20:31	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000162	J	0.000200	0.000130	mg/L		02/12/21 13:22	02/23/21 10:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2200		20.0	20.0	mg/L			02/17/21 14:56	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	5.31		0.461	0.664	1.00	0.134	pCi/L	02/17/21 12:19	03/12/21 10:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.6*		*40 - 110*	*02/17/21 12:19*	*03/12/21 10:44*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	34.9		1.92	3.74	1.00	0.778	pCi/L	03/16/21 16:48	03/22/21 13:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.2*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:03*	*1*
Y Carrier	*83.0*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:03*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: SSP MW-3
Lab Sample ID: 180-117062-1
Date Collected: 02/10/21 10:55
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	40.2		1.97	3.80	5.00	0.778	pCi/L		03/24/21 11:42	1

Client Sample ID: FB-2
Lab Sample ID: 180-117062-2
Date Collected: 02/10/21 10:55
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			02/17/21 21:52	1
Fluoride	<0.0260		0.100	0.0260	mg/L			02/17/21 21:52	1
Sulfate	<0.756		1.00	0.756	mg/L			02/17/21 21:52	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.000313		0.00100	0.000313	mg/L		02/18/21 05:36	02/19/21 20:52	1
Barium	<0.00160		0.0100	0.00160	mg/L		02/18/21 05:36	02/19/21 20:52	1
Beryllium	<0.000182		0.00100	0.000182	mg/L		02/18/21 05:36	02/19/21 20:52	1
Boron	**0.0473**	**J**	0.0800	0.0386	mg/L		02/18/21 05:36	02/24/21 12:44	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		02/18/21 05:36	02/19/21 20:52	1
Calcium	<0.127		0.500	0.127	mg/L		02/18/21 05:36	02/19/21 20:52	1
Chromium	<0.00153		0.00200	0.00153	mg/L		02/18/21 05:36	02/19/21 20:52	1
Cobalt	<0.000134		0.000500	0.000134	mg/L		02/18/21 05:36	02/19/21 20:52	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		02/18/21 05:36	02/19/21 20:52	1
Lead	<0.000128		0.00100	0.000128	mg/L		02/18/21 05:36	02/19/21 20:52	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/18/21 05:36	02/19/21 20:52	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/18/21 05:36	02/19/21 20:52	1
Thallium	<0.000148		0.00100	0.000148	mg/L		02/18/21 05:36	02/19/21 20:52	1
Lithium	<0.00339		0.00500	0.00339	mg/L		02/18/21 05:36	02/19/21 20:52	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/12/21 13:22	02/23/21 10:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10.0		10.0	10.0	mg/L			02/17/21 14:56	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00527	U	0.0630	0.0630	1.00	0.124	pCi/L	02/17/21 12:19	03/12/21 10:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.4*		*40 - 110*	*02/17/21 12:19*	*03/12/21 10:45*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.618**	*	0.287	0.292	1.00	0.408	pCi/L	02/17/21 14:48	03/02/21 09:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.4*		*40 - 110*	*02/17/21 14:48*	*03/02/21 09:04*	*1*
Y Carrier	*80.0*		*40 - 110*	*02/17/21 14:48*	*03/02/21 09:04*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: FB-2
Lab Sample ID: 180-117062-2
Date Collected: 02/10/21 10:55
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.624**		0.294	0.299	5.00	0.408	pCi/L		03/24/21 11:42	1

Client Sample ID: SSP MW-4
Lab Sample ID: 180-117062-3
Date Collected: 02/10/21 12:00
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**990**		5.00	3.57	mg/L			02/17/21 22:54	5
Fluoride	<0.130		0.500	0.130	mg/L			02/17/21 22:54	5
Sulfate	**982**		50.0	37.8	mg/L			02/17/21 23:15	50

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.000941**	J	0.00100	0.000313	mg/L		02/18/21 05:36	02/19/21 20:56	1
Barium	**0.0270**		0.0100	0.00160	mg/L		02/18/21 05:36	02/19/21 20:56	1
Beryllium	<0.000182		0.00100	0.000182	mg/L		02/18/21 05:36	02/19/21 20:56	1
Boron	**1.12**		0.0800	0.0386	mg/L		02/18/21 05:36	02/24/21 12:48	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		02/18/21 05:36	02/19/21 20:56	1
Calcium	**398**		0.500	0.127	mg/L		02/18/21 05:36	02/19/21 20:56	1
Chromium	**0.00259**		0.00200	0.00153	mg/L		02/18/21 05:36	02/19/21 20:56	1
Cobalt	**0.000336**	J	0.000500	0.000134	mg/L		02/18/21 05:36	02/19/21 20:56	1
Molybdenum	**0.00321**	J	0.00500	0.000610	mg/L		02/18/21 05:36	02/19/21 20:56	1
Lead	**0.000161**	J	0.00100	0.000128	mg/L		02/18/21 05:36	02/19/21 20:56	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/18/21 05:36	02/19/21 20:56	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/18/21 05:36	02/19/21 20:56	1
Thallium	<0.000148		0.00100	0.000148	mg/L		02/18/21 05:36	02/19/21 20:56	1
Lithium	**0.727**		0.00500	0.00339	mg/L		02/18/21 05:36	02/19/21 20:56	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/12/21 13:22	02/23/21 11:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**2890**		40.0	40.0	mg/L			02/17/21 14:56	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.600**		0.146	0.156	1.00	0.108	pCi/L	02/17/21 12:19	03/12/21 10:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.9*		*40 - 110*	*02/17/21 12:19*	*03/12/21 10:45*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.02**		0.423	0.434	1.00	0.591	pCi/L	03/16/21 16:48	03/22/21 13:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.9*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:04*	*1*
Y Carrier	*81.9*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:04*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: SSP MW-4
Lab Sample ID: 180-117062-3
Date Collected: 02/10/21 12:00
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.62**		0.447	0.461	5.00	0.591	pCi/L		03/24/21 11:42	1

Client Sample ID: AP MW-3
Lab Sample ID: 180-117062-4
Date Collected: 02/10/21 13:05
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	144		1.00	0.713	mg/L			02/18/21 00:18	1
Fluoride	0.0558	J	0.100	0.0260	mg/L			02/18/21 00:18	1
Sulfate	645		10.0	7.56	mg/L			02/18/21 00:38	10

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00154		0.00100	0.000313	mg/L		02/18/21 05:36	02/19/21 21:00	1
Barium	0.0236		0.0100	0.00160	mg/L		02/18/21 05:36	02/19/21 21:00	1
Beryllium	0.00264		0.00100	0.000182	mg/L		02/18/21 05:36	02/19/21 21:00	1
Boron	4.13		0.160	0.0772	mg/L		02/18/21 05:36	02/24/21 12:51	2
Cadmium	0.00382		0.00100	0.000217	mg/L		02/18/21 05:36	02/19/21 21:00	1
Calcium	134		0.500	0.127	mg/L		02/18/21 05:36	02/19/21 21:00	1
Chromium	0.00173	J	0.00200	0.00153	mg/L		02/18/21 05:36	02/19/21 21:00	1
Cobalt	0.0476		0.000500	0.000134	mg/L		02/18/21 05:36	02/19/21 21:00	1
Molybdenum	0.000848	J	0.00500	0.000610	mg/L		02/18/21 05:36	02/19/21 21:00	1
Lead	0.000456	J	0.00100	0.000128	mg/L		02/18/21 05:36	02/19/21 21:00	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/18/21 05:36	02/19/21 21:00	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/18/21 05:36	02/19/21 21:00	1
Thallium	0.000267	J	0.00100	0.000148	mg/L		02/18/21 05:36	02/19/21 21:00	1
Lithium	0.0530		0.00500	0.00339	mg/L		02/18/21 05:36	02/19/21 21:00	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000455		0.000200	0.000130	mg/L		02/12/21 13:22	02/23/21 11:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1370		10.0	10.0	mg/L			02/17/21 14:56	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.494		0.164	0.170	1.00	0.157	pCi/L	02/17/21 12:19	03/12/21 10:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.3*		*40 - 110*	*02/17/21 12:19*	*03/12/21 10:45*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.37		0.463	0.480	1.00	0.624	pCi/L	03/16/21 16:48	03/22/21 13:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.5*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:04*	*1*
Y Carrier	*82.2*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:04*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: AP MW-3
Lab Sample ID: 180-117062-4
Date Collected: 02/10/21 13:05
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.87		0.491	0.509	5.00	0.624	pCi/L		03/24/21 11:42	1

Client Sample ID: AP MW-1D
Lab Sample ID: 180-117062-5
Date Collected: 02/10/21 13:55
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	151		1.00	0.713	mg/L			02/17/21 20:07	1
Fluoride	0.606		0.100	0.0260	mg/L			02/17/21 20:07	1
Sulfate	456		10.0	7.56	mg/L			02/17/21 20:28	10

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00953		0.00100	0.000313	mg/L		02/18/21 05:36	02/19/21 21:14	1
Barium	0.0137		0.0100	0.00160	mg/L		02/18/21 05:36	02/19/21 21:14	1
Beryllium	<0.000182		0.00100	0.000182	mg/L		02/18/21 05:36	02/19/21 21:14	1
Boron	6.27		0.400	0.193	mg/L		02/18/21 05:36	02/24/21 12:55	5
Cadmium	0.000408	J	0.00100	0.000217	mg/L		02/18/21 05:36	02/19/21 21:14	1
Calcium	96.5		0.500	0.127	mg/L		02/18/21 05:36	02/19/21 21:14	1
Chromium	<0.00153		0.00200	0.00153	mg/L		02/18/21 05:36	02/19/21 21:14	1
Cobalt	0.0139		0.000500	0.000134	mg/L		02/18/21 05:36	02/19/21 21:14	1
Molybdenum	0.0283		0.00500	0.000610	mg/L		02/18/21 05:36	02/19/21 21:14	1
Lead	<0.000128		0.00100	0.000128	mg/L		02/18/21 05:36	02/19/21 21:14	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/18/21 05:36	02/19/21 21:14	1
Selenium	0.00154	J	0.00500	0.00151	mg/L		02/18/21 05:36	02/19/21 21:14	1
Thallium	0.000310	J	0.00100	0.000148	mg/L		02/18/21 05:36	02/19/21 21:14	1
Lithium	0.0270		0.00500	0.00339	mg/L		02/18/21 05:36	02/19/21 21:14	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/12/21 13:22	02/23/21 11:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1250		10.0	10.0	mg/L			02/17/21 14:56	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.181		0.110	0.111	1.00	0.147	pCi/L	02/17/21 12:19	03/12/21 10:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.3*		*40 - 110*	*02/17/21 12:19*	*03/12/21 10:51*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.924		0.387	0.397	1.00	0.541	pCi/L	03/16/21 16:48	03/22/21 13:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.2*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:04*	*1*
Y Carrier	*81.5*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:04*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: AP MW-1D
Lab Sample ID: 180-117062-5
Date Collected: 02/10/21 13:55
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.10		0.402	0.412	5.00	0.541	pCi/L		03/24/21 11:42	1

Client Sample ID: SFL MW-3
Lab Sample ID: 180-117073-1
Date Collected: 02/10/21 07:40
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	897		5.00	3.57	mg/L			02/16/21 01:49	5
Fluoride	0.479	J	0.500	0.130	mg/L			02/16/21 01:49	5
Sulfate	2280		50.0	37.8	mg/L			02/16/21 02:10	50

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00317		0.00100	0.000313	mg/L		02/17/21 07:43	02/18/21 13:27	1
Barium	0.0130		0.0100	0.00160	mg/L		02/17/21 07:43	02/18/21 13:27	1
Beryllium	0.0316		0.00100	0.000182	mg/L		02/17/21 07:43	02/18/21 13:27	1
Boron	3.75		0.0800	0.0386	mg/L		02/17/21 07:43	02/18/21 13:27	1
Cadmium	0.00587		0.00100	0.000217	mg/L		02/17/21 07:43	02/18/21 13:27	1
Calcium	599		0.500	0.127	mg/L		02/17/21 07:43	02/18/21 13:27	1
Chromium	<0.00153		0.00200	0.00153	mg/L		02/17/21 07:43	02/18/21 13:27	1
Cobalt	0.0601		0.000500	0.000134	mg/L		02/17/21 07:43	02/18/21 13:27	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		02/17/21 07:43	02/18/21 13:27	1
Lead	0.0185		0.00100	0.000128	mg/L		02/17/21 07:43	02/18/21 13:27	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/17/21 07:43	02/18/21 13:27	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/17/21 07:43	02/18/21 13:27	1
Thallium	0.00556		0.00100	0.000148	mg/L		02/17/21 07:43	02/18/21 13:27	1
Lithium	0.291		0.00500	0.00339	mg/L		02/17/21 07:43	02/18/21 13:27	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00204		0.000200	0.000130	mg/L		02/23/21 14:39	02/24/21 11:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5040		40.0	40.0	mg/L			02/17/21 14:56	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.13		0.220	0.242	1.00	0.156	pCi/L	02/17/21 12:19	03/12/21 10:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.1*		*40 - 110*	*02/17/21 12:19*	*03/12/21 10:51*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	3.09		0.531	0.602	1.00	0.532	pCi/L	03/16/21 16:48	03/22/21 13:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.1*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:04*	*1*
Y Carrier	*81.9*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:04*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: SFL MW-3
Lab Sample ID: 180-117073-1
Date Collected: 02/10/21 07:40
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	4.22		0.575	0.649	5.00	0.532	pCi/L		03/24/21 11:42	1

Client Sample ID: SFL MW-4
Lab Sample ID: 180-117073-2
Date Collected: 02/10/21 06:30
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1580**		50.0	35.7	mg/L			02/16/21 00:47	50
Fluoride	<0.130		0.500	0.130	mg/L			02/16/21 00:26	5
Sulfate	**1870**		50.0	37.8	mg/L			02/16/21 00:47	50

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00106**		0.00100	0.000313	mg/L		02/17/21 07:43	02/18/21 13:38	1
Barium	**0.0247**		0.0100	0.00160	mg/L		02/17/21 07:43	02/18/21 13:38	1
Beryllium	<0.000182		0.00100	0.000182	mg/L		02/17/21 07:43	02/18/21 13:38	1
Boron	**0.648**		0.0800	0.0386	mg/L		02/17/21 07:43	02/18/21 13:38	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		02/17/21 07:43	02/18/21 13:38	1
Calcium	**704**		0.500	0.127	mg/L		02/17/21 07:43	02/18/21 13:38	1
Chromium	<0.00153		0.00200	0.00153	mg/L		02/17/21 07:43	02/18/21 13:38	1
Cobalt	<0.000134		0.000500	0.000134	mg/L		02/17/21 07:43	02/18/21 13:38	1
Molybdenum	**0.00106**	**J**	0.00500	0.000610	mg/L		02/17/21 07:43	02/18/21 13:38	1
Lead	<0.000128		0.00100	0.000128	mg/L		02/17/21 07:43	02/18/21 13:38	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/17/21 07:43	02/18/21 13:38	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/17/21 07:43	02/18/21 13:38	1
Thallium	<0.000148		0.00100	0.000148	mg/L		02/17/21 07:43	02/18/21 13:38	1
Lithium	**0.402**		0.00500	0.00339	mg/L		02/17/21 07:43	02/18/21 13:38	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/23/21 14:39	02/24/21 11:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**5720**		40.0	40.0	mg/L			02/17/21 14:56	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.370**		0.122	0.127	1.00	0.125	pCi/L	02/17/21 12:19	03/12/21 10:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.2*		*40 - 110*	*02/17/21 12:19*	*03/12/21 10:52*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.750**		0.408	0.414	1.00	0.608	pCi/L	03/16/21 16:48	03/22/21 13:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.9*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:05*	*1*
Y Carrier	*82.2*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:05*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: SFL MW-4
Lab Sample ID: 180-117073-2
Date Collected: 02/10/21 06:30
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.12**		0.426	0.433	5.00	0.608	pCi/L		03/24/21 11:42	1

Client Sample ID: SFL MW-7
Lab Sample ID: 180-117073-3
Date Collected: 02/10/21 06:40
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1920**		50.0	35.7	mg/L			02/15/21 19:55	50
Fluoride	<0.130		0.500	0.130	mg/L			02/15/21 19:34	5
Sulfate	**576**		5.00	3.78	mg/L			02/15/21 19:34	5

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.000313		0.00100	0.000313	mg/L		02/17/21 07:43	02/18/21 13:41	1
Barium	**0.0510**		0.0100	0.00160	mg/L		02/17/21 07:43	02/18/21 13:41	1
Beryllium	<0.000182		0.00100	0.000182	mg/L		02/17/21 07:43	02/18/21 13:41	1
Boron	**0.792**		0.0800	0.0386	mg/L		02/17/21 07:43	02/18/21 13:41	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		02/17/21 07:43	02/18/21 13:41	1
Calcium	**400**		0.500	0.127	mg/L		02/17/21 07:43	02/18/21 13:41	1
Chromium	<0.00153		0.00200	0.00153	mg/L		02/17/21 07:43	02/18/21 13:41	1
Cobalt	<0.000134		0.000500	0.000134	mg/L		02/17/21 07:43	02/18/21 13:41	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		02/17/21 07:43	02/18/21 13:41	1
Lead	**0.000211**	**J**	0.00100	0.000128	mg/L		02/17/21 07:43	02/18/21 13:41	1
Antimony	**0.000579**	**J**	0.00200	0.000378	mg/L		02/17/21 07:43	02/18/21 13:41	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/17/21 07:43	02/18/21 13:41	1
Thallium	<0.000148		0.00100	0.000148	mg/L		02/17/21 07:43	02/18/21 13:41	1
Lithium	**0.375**		0.00500	0.00339	mg/L		02/17/21 07:43	02/18/21 13:41	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/23/21 14:39	02/24/21 11:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**4430**		40.0	40.0	mg/L			02/17/21 14:56	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.734**		0.157	0.170	1.00	0.110	pCi/L	02/17/21 12:19	03/12/21 10:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.7*		*40 - 110*	*02/17/21 12:19*	*03/12/21 10:52*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.83**		0.531	0.557	1.00	0.706	pCi/L	03/16/21 16:48	03/22/21 13:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.7*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:05*	*1*
Y Carrier	*82.6*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:05*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: SFL MW-7
Lab Sample ID: 180-117073-3
Date Collected: 02/10/21 06:40
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**2.56**		0.554	0.582	5.00	0.706	pCi/L		03/24/21 11:42	1

Client Sample ID: SFL MW-6
Lab Sample ID: 180-117073-4
Date Collected: 02/09/21 12:45
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3310		100	71.3	mg/L			02/15/21 15:23	100
Fluoride	0.531	J	1.00	0.260	mg/L			02/15/21 15:03	10
Sulfate	2070		100	75.6	mg/L			02/15/21 15:23	100

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0135		0.00100	0.000313	mg/L		02/17/21 07:43	02/18/21 13:45	1
Barium	0.0537		0.0100	0.00160	mg/L		02/17/21 07:43	02/18/21 13:45	1
Beryllium	0.0489		0.00100	0.000182	mg/L		02/17/21 07:43	02/18/21 13:45	1
Boron	0.329		0.0800	0.0386	mg/L		02/17/21 07:43	02/18/21 13:45	1
Cadmium	0.0105		0.00100	0.000217	mg/L		02/17/21 07:43	02/18/21 13:45	1
Calcium	953		0.500	0.127	mg/L		02/17/21 07:43	02/18/21 13:45	1
Chromium	0.00757		0.00200	0.00153	mg/L		02/17/21 07:43	02/18/21 13:45	1
Cobalt	0.116		0.000500	0.000134	mg/L		02/17/21 07:43	02/18/21 13:45	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		02/17/21 07:43	02/18/21 13:45	1
Lead	0.0150		0.00100	0.000128	mg/L		02/17/21 07:43	02/18/21 13:45	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/17/21 07:43	02/18/21 13:45	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/17/21 07:43	02/18/21 13:45	1
Thallium	0.00339		0.00100	0.000148	mg/L		02/17/21 07:43	02/18/21 13:45	1
Lithium	0.614		0.00500	0.00339	mg/L		02/17/21 07:43	02/18/21 13:45	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/23/21 14:39	02/24/21 11:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	8350		100	100	mg/L			02/15/21 15:28	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.98		0.427	0.504	1.00	0.224	pCi/L	02/17/21 12:19	03/12/21 10:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.1*		*40 - 110*	*02/17/21 12:19*	*03/12/21 10:53*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	11.7	G	1.24	1.64	1.00	1.00	pCi/L	03/16/21 16:48	03/22/21 13:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.0*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:05*	*1*
Y Carrier	*81.9*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:05*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: SFL MW-6
Lab Sample ID: 180-117073-4
Date Collected: 02/09/21 12:45
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	14.6		1.31	1.72	5.00	1.00	pCi/L		03/24/21 11:42	1

Client Sample ID: SSP MW-2
Lab Sample ID: 180-117073-5
Date Collected: 02/10/21 09:55
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1810		50.0	35.7	mg/L			02/16/21 00:05	50
Fluoride	0.509		0.500	0.130	mg/L			02/15/21 23:44	5
Sulfate	2250		50.0	37.8	mg/L			02/16/21 00:05	50

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00643		0.00100	0.000313	mg/L		02/17/21 07:45	02/18/21 18:09	1
Barium	0.0197		0.0100	0.00160	mg/L		02/17/21 07:45	02/18/21 18:09	1
Beryllium	0.0704		0.00100	0.000182	mg/L		02/17/21 07:45	02/18/21 18:09	1
Boron	0.810		0.0800	0.0386	mg/L		02/17/21 07:45	02/18/21 18:09	1
Cadmium	0.00446		0.00100	0.000217	mg/L		02/17/21 07:45	02/18/21 18:09	1
Calcium	728		0.500	0.127	mg/L		02/17/21 07:45	02/18/21 18:09	1
Chromium	<0.00153		0.00200	0.00153	mg/L		02/17/21 07:45	02/18/21 18:09	1
Cobalt	0.116		0.000500	0.000134	mg/L		02/17/21 07:45	02/18/21 18:09	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		02/17/21 07:45	02/18/21 18:09	1
Lead	0.00227		0.00100	0.000128	mg/L		02/17/21 07:45	02/18/21 18:09	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/17/21 07:45	02/18/21 18:09	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/17/21 07:45	02/18/21 18:09	1
Thallium	0.000516	J	0.00100	0.000148	mg/L		02/17/21 07:45	02/18/21 18:09	1
Lithium	0.564		0.00500	0.00339	mg/L		02/17/21 07:45	02/18/21 18:09	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/23/21 14:39	02/24/21 11:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	6120		100	100	mg/L			02/17/21 14:56	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.415		0.144	0.148	1.00	0.138	pCi/L	02/17/21 12:19	03/12/21 10:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.0*		*40 - 110*	*02/17/21 12:19*	*03/12/21 10:53*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.92		0.502	0.532	1.00	0.610	pCi/L	03/16/21 16:48	03/22/21 13:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.5*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:36*	*1*
Y Carrier	*80.4*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:36*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: SSP MW-2
Lab Sample ID: 180-117073-5
Date Collected: 02/10/21 09:55
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.33		0.522	0.552	5.00	0.610	pCi/L		03/24/21 11:42	1

Client Sample ID: AP MW-5
Lab Sample ID: 180-117074-1
Date Collected: 02/10/21 14:40
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	322		2.50	1.78	mg/L			02/16/21 02:31	2.5
Fluoride	1.18		0.250	0.0650	mg/L			02/16/21 02:31	2.5
Sulfate	1670		25.0	18.9	mg/L			02/16/21 02:52	25

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00950		0.00100	0.000313	mg/L		02/18/21 11:38	02/19/21 21:43	1
Barium	0.0556		0.0100	0.00160	mg/L		02/18/21 11:38	02/19/21 21:43	1
Beryllium	0.0520		0.00100	0.000182	mg/L		02/18/21 11:38	02/19/21 21:43	1
Boron	3.53		0.160	0.0772	mg/L		02/18/21 11:38	02/27/21 11:19	2
Cadmium	0.00523		0.00100	0.000217	mg/L		02/18/21 11:38	02/19/21 21:43	1
Calcium	354		0.500	0.127	mg/L		02/18/21 11:38	02/19/21 21:43	1
Chromium	0.00228		0.00200	0.00153	mg/L		02/18/21 11:38	02/19/21 21:43	1
Cobalt	0.115		0.000500	0.000134	mg/L		02/18/21 11:38	02/19/21 21:43	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		02/18/21 11:38	02/19/21 21:43	1
Lead	0.00473		0.00100	0.000128	mg/L		02/18/21 11:38	02/19/21 21:43	1
Antimony	0.000664	J	0.00200	0.000378	mg/L		02/18/21 11:38	02/19/21 21:43	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/18/21 11:38	02/19/21 21:43	1
Thallium	0.00213		0.00100	0.000148	mg/L		02/18/21 11:38	02/19/21 21:43	1
Lithium	0.381		0.00500	0.00339	mg/L		02/18/21 11:38	02/19/21 21:43	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00643		0.000200	0.000130	mg/L		02/12/21 13:22	02/23/21 11:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	3380		40.0	40.0	mg/L			02/17/21 14:56	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.535		0.242	0.247	1.00	0.274	pCi/L	02/17/21 12:19	03/12/21 10:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*61.0*		*40 - 110*	*02/17/21 12:19*	*03/12/21 10:54*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.879	U	0.625	0.630	1.00	0.979	pCi/L	03/16/21 16:48	03/22/21 13:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.8*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:10*	*1*
Y Carrier	*82.6*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:10*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: AP MW-5
Lab Sample ID: 180-117074-1
Date Collected: 02/10/21 14:40
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.41		0.670	0.677	5.00	0.979	pCi/L		03/24/21 11:42	1

Client Sample ID: AP MW-4
Lab Sample ID: 180-117074-2
Date Collected: 02/10/21 15:28
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**436**		5.00	3.57	mg/L			02/15/21 20:15	5
Fluoride	<0.130		0.500	0.130	mg/L			02/15/21 20:15	5
Sulfate	**2050**		50.0	37.8	mg/L			02/15/21 20:36	50

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.000628**	**J**	0.00100	0.000313	mg/L		02/18/21 11:38	02/19/21 22:16	1
Barium	**0.0144**		0.0100	0.00160	mg/L		02/18/21 11:38	02/19/21 22:16	1
Beryllium	**0.000436**	**J**	0.00100	0.000182	mg/L		02/18/21 11:38	02/19/21 22:16	1
Boron	**2.58**		0.0800	0.0386	mg/L		02/18/21 11:38	02/27/21 11:29	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		02/18/21 11:38	02/19/21 22:16	1
Calcium	**533**		0.500	0.127	mg/L		02/18/21 11:38	02/19/21 22:16	1
Chromium	<0.00153		0.00200	0.00153	mg/L		02/18/21 11:38	02/19/21 22:16	1
Cobalt	<0.000134		0.000500	0.000134	mg/L		02/18/21 11:38	02/19/21 22:16	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		02/18/21 11:38	02/19/21 22:16	1
Lead	**0.000276**	**J**	0.00100	0.000128	mg/L		02/18/21 11:38	02/19/21 22:16	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/18/21 11:38	02/19/21 22:16	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/18/21 11:38	02/19/21 22:16	1
Thallium	**0.000172**	**J**	0.00100	0.000148	mg/L		02/18/21 11:38	02/19/21 22:16	1
Lithium	**0.875**		0.00500	0.00339	mg/L		02/18/21 11:38	02/19/21 22:16	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/12/21 13:22	02/23/21 11:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**4040**		40.0	40.0	mg/L			02/17/21 14:56	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.338**		0.138	0.141	1.00	0.150	pCi/L	02/17/21 12:19	03/12/21 10:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.8*		*40 - 110*	*02/17/21 12:19*	*03/12/21 10:54*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.38**		0.416	0.435	1.00	0.515	pCi/L	03/16/21 16:48	03/22/21 13:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.2*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:10*	*1*
Y Carrier	*82.2*		*40 - 110*	*03/16/21 16:48*	*03/22/21 13:10*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: AP MW-4
Lab Sample ID: 180-117074-2
Date Collected: 02/10/21 15:28
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.72**		0.438	0.457	5.00	0.515	pCi/L		03/24/21 11:42	1

Client Sample ID: EQ-1
Lab Sample ID: 180-117074-3
Date Collected: 02/10/21 16:00
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			02/15/21 21:39	1
Fluoride	<0.0260		0.100	0.0260	mg/L			02/15/21 21:39	1
Sulfate	<0.756		1.00	0.756	mg/L			02/15/21 21:39	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.000313		0.00100	0.000313	mg/L		02/18/21 11:38	02/19/21 22:19	1
Barium	<0.00160		0.0100	0.00160	mg/L		02/18/21 11:38	02/19/21 22:19	1
Beryllium	<0.000182		0.00100	0.000182	mg/L		02/18/21 11:38	02/19/21 22:19	1
Boron	**0.0565**	**J**	0.0800	0.0386	mg/L		02/18/21 11:38	02/27/21 11:32	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		02/18/21 11:38	02/19/21 22:19	1
Calcium	**0.182**	**J**	0.500	0.127	mg/L		02/18/21 11:38	02/19/21 22:19	1
Chromium	<0.00153		0.00200	0.00153	mg/L		02/18/21 11:38	02/19/21 22:19	1
Cobalt	<0.000134		0.000500	0.000134	mg/L		02/18/21 11:38	02/19/21 22:19	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		02/18/21 11:38	02/19/21 22:19	1
Lead	<0.000128		0.00100	0.000128	mg/L		02/18/21 11:38	02/19/21 22:19	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/18/21 11:38	02/19/21 22:19	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/18/21 11:38	02/19/21 22:19	1
Thallium	<0.000148		0.00100	0.000148	mg/L		02/18/21 11:38	02/19/21 22:19	1
Lithium	<0.00339		0.00500	0.00339	mg/L		02/18/21 11:38	02/19/21 22:19	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/12/21 13:22	02/23/21 11:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10.0		10.0	10.0	mg/L			02/17/21 14:59	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0620	U	0.0655	0.0657	1.00	0.104	pCi/L	02/17/21 12:19	03/12/21 10:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.3*		*40 - 110*	*02/17/21 12:19*	*03/12/21 10:54*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.763**	*	0.306	0.314	1.00	0.419	pCi/L	02/17/21 14:48	03/02/21 09:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.3*		*40 - 110*	*02/17/21 14:48*	*03/02/21 09:06*	*1*
Y Carrier	*80.0*		*40 - 110*	*02/17/21 14:48*	*03/02/21 09:06*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: EQ-1
Lab Sample ID: 180-117074-3
Date Collected: 02/10/21 16:00
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.825**		0.313	0.321	5.00	0.419	pCi/L		03/24/21 11:42	1

Client Sample ID: MNW-15
Lab Sample ID: 180-117078-1
Date Collected: 02/09/21 15:55
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	584		5.00	3.57	mg/L			02/16/21 05:39	5
Fluoride	0.840		0.500	0.130	mg/L			02/16/21 05:39	5
Sulfate	1350		50.0	37.8	mg/L			02/16/21 06:00	50

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00774		0.00100	0.000313	mg/L		02/18/21 11:38	02/19/21 22:23	1
Barium	0.0175		0.0100	0.00160	mg/L		02/18/21 11:38	02/19/21 22:23	1
Beryllium	0.0902		0.00100	0.000182	mg/L		02/18/21 11:38	02/19/21 22:23	1
Boron	9.06		0.400	0.193	mg/L		02/18/21 11:38	02/27/21 11:35	5
Cadmium	0.0421		0.00100	0.000217	mg/L		02/18/21 11:38	02/19/21 22:23	1
Calcium	325		0.500	0.127	mg/L		02/18/21 11:38	02/19/21 22:23	1
Chromium	<0.00153		0.00200	0.00153	mg/L		02/18/21 11:38	02/19/21 22:23	1
Cobalt	0.356		0.000500	0.000134	mg/L		02/18/21 11:38	02/19/21 22:23	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		02/18/21 11:38	02/19/21 22:23	1
Lead	0.000555	J	0.00100	0.000128	mg/L		02/18/21 11:38	02/19/21 22:23	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/18/21 11:38	02/19/21 22:23	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/18/21 11:38	02/19/21 22:23	1
Thallium	0.000739	J	0.00100	0.000148	mg/L		02/18/21 11:38	02/19/21 22:23	1
Lithium	0.111		0.00500	0.00339	mg/L		02/18/21 11:38	02/19/21 22:23	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/23/21 14:39	02/24/21 11:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	6150		40.0	40.0	mg/L			02/15/21 15:28	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.126		0.0803	0.0811	1.00	0.109	pCi/L	02/17/21 12:19	03/12/21 10:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.2*		*40 - 110*	*02/17/21 12:19*	*03/12/21 10:54*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.452	*	0.234	0.238	1.00	0.335	pCi/L	02/17/21 14:48	03/02/21 09:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.2*		*40 - 110*	*02/17/21 14:48*	*03/02/21 09:08*	*1*
Y Carrier	*85.6*		*40 - 110*	*02/17/21 14:48*	*03/02/21 09:08*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: MNW-15
Lab Sample ID: 180-117078-1
Date Collected: 02/09/21 15:55
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.577		0.247	0.251	5.00	0.335	pCi/L		03/24/21 11:42	1

Client Sample ID: DUP-1
Lab Sample ID: 180-117078-2
Date Collected: 02/09/21 18:10
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	617		5.00	3.57	mg/L			02/16/21 06:20	5
Fluoride	0.843		0.500	0.130	mg/L			02/16/21 06:20	5
Sulfate	1350		50.0	37.8	mg/L			02/16/21 06:41	50

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00828		0.00100	0.000313	mg/L		02/18/21 11:38	02/19/21 22:26	1
Barium	0.0181		0.0100	0.00160	mg/L		02/18/21 11:38	02/19/21 22:26	1
Beryllium	0.0907		0.00100	0.000182	mg/L		02/18/21 11:38	02/19/21 22:26	1
Boron	10.4		0.400	0.193	mg/L		02/18/21 11:38	02/25/21 14:34	5
Cadmium	0.0426		0.00100	0.000217	mg/L		02/18/21 11:38	02/19/21 22:26	1
Calcium	330		0.500	0.127	mg/L		02/18/21 11:38	02/19/21 22:26	1
Chromium	<0.00153		0.00200	0.00153	mg/L		02/18/21 11:38	02/19/21 22:26	1
Cobalt	0.363		0.000500	0.000134	mg/L		02/18/21 11:38	02/19/21 22:26	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		02/18/21 11:38	02/19/21 22:26	1
Lead	0.000548	J	0.00100	0.000128	mg/L		02/18/21 11:38	02/19/21 22:26	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/18/21 11:38	02/19/21 22:26	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/18/21 11:38	02/19/21 22:26	1
Thallium	0.000752	J	0.00100	0.000148	mg/L		02/18/21 11:38	02/19/21 22:26	1
Lithium	0.111		0.00500	0.00339	mg/L		02/18/21 11:38	02/19/21 22:26	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/23/21 14:39	02/24/21 11:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	3000		40.0	40.0	mg/L			02/15/21 15:28	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0721	U	0.0692	0.0695	1.00	0.107	pCi/L	02/17/21 12:19	03/12/21 10:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.6*		*40 - 110*	*02/17/21 12:19*	*03/12/21 10:55*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.467	*	0.266	0.270	1.00	0.397	pCi/L	02/17/21 14:48	03/02/21 09:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.6*		*40 - 110*	*02/17/21 14:48*	*03/02/21 09:08*	*1*
Y Carrier	*86.7*		*40 - 110*	*02/17/21 14:48*	*03/02/21 09:08*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: DUP-1
Lab Sample ID: 180-117078-2
Date Collected: 02/09/21 18:10
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.539		0.275	0.279	5.00	0.397	pCi/L		03/24/21 11:42	1

Client Sample ID: SFL MW-2 — **Lab Sample ID: 180-117078-3**
Date Collected: 02/09/21 14:45 — **Matrix: Water**
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2100		50.0	35.7	mg/L			02/15/21 23:23	50
Fluoride	0.190	J	0.500	0.130	mg/L			02/15/21 23:02	5
Sulfate	1290		50.0	37.8	mg/L			02/15/21 23:23	50

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00227		0.00100	0.000313	mg/L		02/18/21 11:38	02/19/21 22:30	1
Barium	0.0235		0.0100	0.00160	mg/L		02/18/21 11:38	02/19/21 22:30	1
Beryllium	0.00132		0.00100	0.000182	mg/L		02/18/21 11:38	02/19/21 22:30	1
Boron	0.464		0.0800	0.0386	mg/L		02/18/21 11:38	02/25/21 14:38	1
Cadmium	0.000761	J	0.00100	0.000217	mg/L		02/18/21 11:38	02/19/21 22:30	1
Calcium	691		0.500	0.127	mg/L		02/18/21 11:38	02/19/21 22:30	1
Chromium	<0.00153		0.00200	0.00153	mg/L		02/18/21 11:38	02/19/21 22:30	1
Cobalt	0.0110		0.000500	0.000134	mg/L		02/18/21 11:38	02/19/21 22:30	1
Molybdenum	0.00202	J	0.00500	0.000610	mg/L		02/18/21 11:38	02/19/21 22:30	1
Lead	0.00132		0.00100	0.000128	mg/L		02/18/21 11:38	02/19/21 22:30	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/18/21 11:38	02/19/21 22:30	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/18/21 11:38	02/19/21 22:30	1
Thallium	0.000612	J	0.00100	0.000148	mg/L		02/18/21 11:38	02/19/21 22:30	1
Lithium	0.476		0.00500	0.00339	mg/L		02/18/21 11:38	02/19/21 22:30	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/23/21 14:39	02/24/21 11:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5730		50.0	50.0	mg/L			02/15/21 15:28	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.69		0.225	0.272	1.00	0.110	pCi/L	02/18/21 09:54	03/15/21 16:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.0*		*40 - 110*	*02/18/21 09:54*	*03/15/21 16:55*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	6.52		0.622	0.864	1.00	0.452	pCi/L	02/18/21 10:43	03/04/21 08:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.0*		*40 - 110*	*02/18/21 10:43*	*03/04/21 08:28*	*1*
Y Carrier	*81.5*		*40 - 110*	*02/18/21 10:43*	*03/04/21 08:28*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: SFL MW-2 — Lab Sample ID: 180-117078-3
Date Collected: 02/09/21 14:45 — Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	8.22		0.661	0.906	5.00	0.452	pCi/L		03/17/21 15:15	1

Client Sample ID: SFL MW-5
Lab Sample ID: 180-117078-4
Date Collected: 02/09/21 13:55
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2340		100	71.3	mg/L			02/15/21 22:42	100
Fluoride	<0.260		1.00	0.260	mg/L			02/15/21 22:21	10
Sulfate	1720		10.0	7.56	mg/L			02/15/21 22:21	10

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00330		0.00100	0.000313	mg/L		02/18/21 11:38	02/19/21 22:44	1
Barium	0.0212		0.0100	0.00160	mg/L		02/18/21 11:38	02/19/21 22:44	1
Beryllium	0.00918		0.00100	0.000182	mg/L		02/18/21 11:38	02/19/21 22:44	1
Boron	4.34		0.160	0.0772	mg/L		02/18/21 11:38	02/25/21 14:52	2
Cadmium	0.00385		0.00100	0.000217	mg/L		02/18/21 11:38	02/19/21 22:44	1
Calcium	837		0.500	0.127	mg/L		02/18/21 11:38	02/19/21 22:44	1
Chromium	0.00441		0.00200	0.00153	mg/L		02/18/21 11:38	02/19/21 22:44	1
Cobalt	0.0450		0.000500	0.000134	mg/L		02/18/21 11:38	02/19/21 22:44	1
Molybdenum	0.00180	J	0.00500	0.000610	mg/L		02/18/21 11:38	02/19/21 22:44	1
Lead	0.000725	J	0.00100	0.000128	mg/L		02/18/21 11:38	02/19/21 22:44	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/18/21 11:38	02/19/21 22:44	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/18/21 11:38	02/19/21 22:44	1
Thallium	0.00120		0.00100	0.000148	mg/L		02/18/21 11:38	02/19/21 22:44	1
Lithium	0.677		0.00500	0.00339	mg/L		02/18/21 11:38	02/19/21 22:44	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/23/21 14:39	02/24/21 11:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	7820		100	100	mg/L			02/15/21 15:28	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.35		0.266	0.340	1.00	0.109	pCi/L	02/18/21 09:54	03/15/21 16:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.3*		*40 - 110*	*02/18/21 09:54*	*03/15/21 16:55*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	11.2		0.801	1.30	1.00	0.445	pCi/L	02/18/21 10:43	03/04/21 08:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.3*		*40 - 110*	*02/18/21 10:43*	*03/04/21 08:28*	*1*
Y Carrier	*80.7*		*40 - 110*	*02/18/21 10:43*	*03/04/21 08:28*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: SFL MW-5
Lab Sample ID: 180-117078-4
Date Collected: 02/09/21 13:55
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	13.5		0.844	1.34	5.00	0.445	pCi/L		03/17/21 15:15	1

Client Sample ID: FB-1
Lab Sample ID: 180-117078-5
Date Collected: 02/09/21 13:45
Matrix: Water
Date Received: 02/11/21 11:00

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			02/15/21 22:00	1
Fluoride	<0.0260		0.100	0.0260	mg/L			02/15/21 22:00	1
Sulfate	<0.756		1.00	0.756	mg/L			02/15/21 22:00	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.000313		0.00100	0.000313	mg/L		02/18/21 11:38	02/19/21 23:06	1
Barium	<0.00160		0.0100	0.00160	mg/L		02/18/21 11:38	02/19/21 23:06	1
Beryllium	<0.000182		0.00100	0.000182	mg/L		02/18/21 11:38	02/19/21 23:06	1
Boron	**0.0505**	**J**	0.0800	0.0386	mg/L		02/18/21 11:38	02/25/21 14:56	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		02/18/21 11:38	02/19/21 23:06	1
Calcium	<0.127		0.500	0.127	mg/L		02/18/21 11:38	02/19/21 23:06	1
Chromium	<0.00153		0.00200	0.00153	mg/L		02/18/21 11:38	02/19/21 23:06	1
Cobalt	<0.000134		0.000500	0.000134	mg/L		02/18/21 11:38	02/19/21 23:06	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		02/18/21 11:38	02/19/21 23:06	1
Lead	<0.000128		0.00100	0.000128	mg/L		02/18/21 11:38	02/19/21 23:06	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/18/21 11:38	02/19/21 23:06	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/18/21 11:38	02/19/21 23:06	1
Thallium	<0.000148		0.00100	0.000148	mg/L		02/18/21 11:38	02/19/21 23:06	1
Lithium	<0.00339		0.00500	0.00339	mg/L		02/18/21 11:38	02/19/21 23:06	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/23/21 14:39	02/24/21 11:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10.0		10.0	10.0	mg/L			02/15/21 15:28	1

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0249	U	0.0556	0.0556	1.00	0.101	pCi/L	02/18/21 09:54	03/15/21 16:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.4*		*40 - 110*	*02/18/21 09:54*	*03/15/21 16:56*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.145	U	0.256	0.256	1.00	0.434	pCi/L	02/18/21 10:43	03/04/21 08:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.4*		*40 - 110*	*02/18/21 10:43*	*03/04/21 08:29*	*1*
Y Carrier	*76.3*		*40 - 110*	*02/18/21 10:43*	*03/04/21 08:29*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Client Sample ID: FB-1
Lab Sample ID: 180-117078-5
Date Collected: 02/09/21 13:45
Matrix: Water
Date Received: 02/11/21 11:00

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.170	U	0.262	0.262	5.00	0.434	pCi/L		03/17/21 15:15	1

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-346554/49
Matrix: Water
Analysis Batch: 346554
Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			02/16/21 04:15	1
Fluoride	<0.0260		0.100	0.0260	mg/L			02/16/21 04:15	1
Sulfate	<0.756		1.00	0.756	mg/L			02/16/21 04:15	1

Lab Sample ID: MB 180-346554/6
Matrix: Water
Analysis Batch: 346554
Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			02/15/21 09:34	1
Fluoride	<0.0260		0.100	0.0260	mg/L			02/15/21 09:34	1
Sulfate	<0.756		1.00	0.756	mg/L			02/15/21 09:34	1

Lab Sample ID: LCS 180-346554/48
Matrix: Water
Analysis Batch: 346554
Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	53.30		mg/L		107	80 - 120
Fluoride	2.50	2.505		mg/L		100	80 - 120
Sulfate	50.0	53.02		mg/L		106	80 - 120

Lab Sample ID: LCS 180-346554/5
Matrix: Water
Analysis Batch: 346554
Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	51.77		mg/L		104	80 - 120
Fluoride	2.50	2.444		mg/L		98	80 - 120
Sulfate	50.0	51.32		mg/L		103	80 - 120

Lab Sample ID: MB 180-346770/6
Matrix: Water
Analysis Batch: 346770
Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.713		1.00	0.713	mg/L			02/17/21 07:33	1
Fluoride	<0.0260		0.100	0.0260	mg/L			02/17/21 07:33	1
Sulfate	<0.756		1.00	0.756	mg/L			02/17/21 07:33	1

Lab Sample ID: LCS 180-346770/5
Matrix: Water
Analysis Batch: 346770
Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	52.96		mg/L		106	80 - 120
Fluoride	2.50	2.493		mg/L		100	80 - 120
Sulfate	50.0	52.63		mg/L		105	80 - 120

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-346793/1-A
Matrix: Water
Analysis Batch: 347047
Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 346793

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.000313		0.00100	0.000313	mg/L		02/17/21 07:43	02/18/21 11:45	1
Barium	<0.00160		0.0100	0.00160	mg/L		02/17/21 07:43	02/18/21 11:45	1
Beryllium	<0.000182		0.00100	0.000182	mg/L		02/17/21 07:43	02/18/21 11:45	1
Boron	<0.0386		0.0800	0.0386	mg/L		02/17/21 07:43	02/18/21 11:45	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		02/17/21 07:43	02/18/21 11:45	1
Calcium	<0.127		0.500	0.127	mg/L		02/17/21 07:43	02/18/21 11:45	1
Chromium	<0.00153		0.00200	0.00153	mg/L		02/17/21 07:43	02/18/21 11:45	1
Cobalt	<0.000134		0.000500	0.000134	mg/L		02/17/21 07:43	02/18/21 11:45	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		02/17/21 07:43	02/18/21 11:45	1
Lead	<0.000128		0.00100	0.000128	mg/L		02/17/21 07:43	02/18/21 11:45	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/17/21 07:43	02/18/21 11:45	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/17/21 07:43	02/18/21 11:45	1
Thallium	<0.000148		0.00100	0.000148	mg/L		02/17/21 07:43	02/18/21 11:45	1
Lithium	<0.00339		0.00500	0.00339	mg/L		02/17/21 07:43	02/18/21 11:45	1

Lab Sample ID: LCS 180-346793/2-A
Matrix: Water
Analysis Batch: 347047
Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 346793

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	1.009		mg/L		101	80 - 120
Barium	1.00	0.9858		mg/L		99	80 - 120
Beryllium	0.500	0.5006		mg/L		100	80 - 120
Boron	1.25	1.161		mg/L		93	80 - 120
Cadmium	0.500	0.5033		mg/L		101	80 - 120
Calcium	25.0	26.19		mg/L		105	80 - 120
Chromium	0.500	0.4932		mg/L		99	80 - 120
Cobalt	0.500	0.5071		mg/L		101	80 - 120
Molybdenum	0.500	0.5099		mg/L		102	80 - 120
Lead	0.500	0.5021		mg/L		100	80 - 120
Antimony	0.250	0.2325		mg/L		93	80 - 120
Selenium	1.00	1.010		mg/L		101	80 - 120
Thallium	1.00	1.062		mg/L		106	80 - 120
Lithium	0.500	0.4880		mg/L		98	80 - 120

Lab Sample ID: MB 180-346794/1-A
Matrix: Water
Analysis Batch: 347047
Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 346794

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.000313		0.00100	0.000313	mg/L		02/17/21 07:45	02/18/21 16:20	1
Barium	<0.00160		0.0100	0.00160	mg/L		02/17/21 07:45	02/18/21 16:20	1
Beryllium	<0.000182		0.00100	0.000182	mg/L		02/17/21 07:45	02/18/21 16:20	1
Boron	<0.0386		0.0800	0.0386	mg/L		02/17/21 07:45	02/18/21 16:20	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		02/17/21 07:45	02/18/21 16:20	1
Calcium	<0.127		0.500	0.127	mg/L		02/17/21 07:45	02/18/21 16:20	1
Chromium	<0.00153		0.00200	0.00153	mg/L		02/17/21 07:45	02/18/21 16:20	1
Cobalt	<0.000134		0.000500	0.000134	mg/L		02/17/21 07:45	02/18/21 16:20	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		02/17/21 07:45	02/18/21 16:20	1

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 180-346794/1-A
Matrix: Water
Analysis Batch: 347047

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 346794

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.000128		0.00100	0.000128	mg/L		02/17/21 07:45	02/18/21 16:20	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/17/21 07:45	02/18/21 16:20	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/17/21 07:45	02/18/21 16:20	1
Thallium	<0.000148		0.00100	0.000148	mg/L		02/17/21 07:45	02/18/21 16:20	1
Lithium	<0.00339		0.00500	0.00339	mg/L		02/17/21 07:45	02/18/21 16:20	1

Lab Sample ID: LCS 180-346794/2-A
Matrix: Water
Analysis Batch: 347047

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 346794

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	0.9923		mg/L		99	80 - 120
Barium	1.00	0.9865		mg/L		99	80 - 120
Beryllium	0.500	0.5038		mg/L		101	80 - 120
Boron	1.25	1.175		mg/L		94	80 - 120
Cadmium	0.500	0.5022		mg/L		100	80 - 120
Calcium	25.0	26.36		mg/L		105	80 - 120
Chromium	0.500	0.4953		mg/L		99	80 - 120
Cobalt	0.500	0.4969		mg/L		99	80 - 120
Molybdenum	0.500	0.5053		mg/L		101	80 - 120
Lead	0.500	0.4962		mg/L		99	80 - 120
Antimony	0.250	0.2350		mg/L		94	80 - 120
Selenium	1.00	1.018		mg/L		102	80 - 120
Thallium	1.00	1.066		mg/L		107	80 - 120
Lithium	0.500	0.4866		mg/L		97	80 - 120

Lab Sample ID: MB 180-346914/1-A
Matrix: Water
Analysis Batch: 347383

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 346914

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.000313		0.00100	0.000313	mg/L		02/18/21 05:36	02/19/21 18:16	1
Barium	<0.00160		0.0100	0.00160	mg/L		02/18/21 05:36	02/19/21 18:16	1
Beryllium	<0.000182		0.00100	0.000182	mg/L		02/18/21 05:36	02/19/21 18:16	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		02/18/21 05:36	02/19/21 18:16	1
Calcium	<0.127		0.500	0.127	mg/L		02/18/21 05:36	02/19/21 18:16	1
Chromium	<0.00153		0.00200	0.00153	mg/L		02/18/21 05:36	02/19/21 18:16	1
Cobalt	<0.000134		0.000500	0.000134	mg/L		02/18/21 05:36	02/19/21 18:16	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		02/18/21 05:36	02/19/21 18:16	1
Lead	<0.000128		0.00100	0.000128	mg/L		02/18/21 05:36	02/19/21 18:16	1
Antimony	0.0004060	J	0.00200	0.000378	mg/L		02/18/21 05:36	02/19/21 18:16	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/18/21 05:36	02/19/21 18:16	1
Thallium	<0.000148		0.00100	0.000148	mg/L		02/18/21 05:36	02/19/21 18:16	1
Lithium	<0.00339		0.00500	0.00339	mg/L		02/18/21 05:36	02/19/21 18:16	1

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 180-346914/1-A
Matrix: Water
Analysis Batch: 347575

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 346914

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		02/18/21 05:36	02/24/21 11:03	1

Lab Sample ID: LCS 180-346914/2-A
Matrix: Water
Analysis Batch: 347383

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 346914

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	0.9534		mg/L		95	80 - 120
Barium	1.00	1.006		mg/L		101	80 - 120
Beryllium	0.500	0.5161		mg/L		103	80 - 120
Cadmium	0.500	0.5015		mg/L		100	80 - 120
Calcium	25.0	27.02		mg/L		108	80 - 120
Chromium	0.500	0.5069		mg/L		101	80 - 120
Cobalt	0.500	0.4903		mg/L		98	80 - 120
Molybdenum	0.500	0.5036		mg/L		101	80 - 120
Lead	0.500	0.5032		mg/L		101	80 - 120
Antimony	0.250	0.2388		mg/L		96	80 - 120
Selenium	1.00	0.9879		mg/L		99	80 - 120
Thallium	1.00	1.037		mg/L		104	80 - 120
Lithium	0.500	0.4937		mg/L		99	80 - 120

Lab Sample ID: LCS 180-346914/2-A
Matrix: Water
Analysis Batch: 347575

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 346914

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.25	1.252		mg/L		100	80 - 120

Lab Sample ID: MB 180-346981/1-A
Matrix: Water
Analysis Batch: 347383

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 346981

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.000313		0.00100	0.000313	mg/L		02/18/21 11:38	02/19/21 21:36	1
Barium	<0.00160		0.0100	0.00160	mg/L		02/18/21 11:38	02/19/21 21:36	1
Beryllium	<0.000182		0.00100	0.000182	mg/L		02/18/21 11:38	02/19/21 21:36	1
Cadmium	<0.000217		0.00100	0.000217	mg/L		02/18/21 11:38	02/19/21 21:36	1
Calcium	<0.127		0.500	0.127	mg/L		02/18/21 11:38	02/19/21 21:36	1
Chromium	<0.00153		0.00200	0.00153	mg/L		02/18/21 11:38	02/19/21 21:36	1
Cobalt	<0.000134		0.000500	0.000134	mg/L		02/18/21 11:38	02/19/21 21:36	1
Molybdenum	<0.000610		0.00500	0.000610	mg/L		02/18/21 11:38	02/19/21 21:36	1
Lead	<0.000128		0.00100	0.000128	mg/L		02/18/21 11:38	02/19/21 21:36	1
Antimony	<0.000378		0.00200	0.000378	mg/L		02/18/21 11:38	02/19/21 21:36	1
Selenium	<0.00151		0.00500	0.00151	mg/L		02/18/21 11:38	02/19/21 21:36	1
Thallium	<0.000148		0.00100	0.000148	mg/L		02/18/21 11:38	02/19/21 21:36	1
Lithium	<0.00339		0.00500	0.00339	mg/L		02/18/21 11:38	02/19/21 21:36	1

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 180-346981/1-A
Matrix: Water
Analysis Batch: 347575

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 346981

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.07510	J	0.0800	0.0386	mg/L		02/18/21 11:38	02/24/21 13:02	1

Lab Sample ID: MB 180-346981/1-A
Matrix: Water
Analysis Batch: 347908

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 346981

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.0386		0.0800	0.0386	mg/L		02/18/21 11:38	02/27/21 11:14	1

Lab Sample ID: LCS 180-346981/2-A
Matrix: Water
Analysis Batch: 347383

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 346981

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	0.9740		mg/L		97	80 - 120
Barium	1.00	1.020		mg/L		102	80 - 120
Beryllium	0.500	0.5307		mg/L		106	80 - 120
Cadmium	0.500	0.5092		mg/L		102	80 - 120
Calcium	25.0	27.66		mg/L		111	80 - 120
Chromium	0.500	0.5092		mg/L		102	80 - 120
Cobalt	0.500	0.4955		mg/L		99	80 - 120
Molybdenum	0.500	0.5101		mg/L		102	80 - 120
Lead	0.500	0.5079		mg/L		102	80 - 120
Antimony	0.250	0.2436		mg/L		97	80 - 120
Selenium	1.00	1.009		mg/L		101	80 - 120
Thallium	1.00	1.067		mg/L		107	80 - 120
Lithium	0.500	0.4912		mg/L		98	80 - 120

Lab Sample ID: LCS 180-346981/2-A
Matrix: Water
Analysis Batch: 347575

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 346981

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.25	1.281		mg/L		102	80 - 120

Lab Sample ID: LCS 180-346981/2-A
Matrix: Water
Analysis Batch: 347908

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 346981

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.25	1.174		mg/L		94	80 - 120

Lab Sample ID: 180-117074-1 MS
Matrix: Water
Analysis Batch: 347383

Client Sample ID: AP MW-5
Prep Type: Total Recoverable
Prep Batch: 346981

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.00950		1.00	1.036		mg/L		103	75 - 125
Barium	0.0556		1.00	1.099		mg/L		104	75 - 125
Beryllium	0.0520		0.500	0.5490		mg/L		99	75 - 125

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-117074-1 MS
Matrix: Water
Analysis Batch: 347383

Client Sample ID: AP MW-5
Prep Type: Total Recoverable
Prep Batch: 346981

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.00523		0.500	0.5079		mg/L		101	75 - 125
Calcium	354		25.0	382.6	4	mg/L		114	75 - 125
Chromium	0.00228		0.500	0.5056		mg/L		101	75 - 125
Cobalt	0.115		0.500	0.6355		mg/L		104	75 - 125
Molybdenum	<0.000610		0.500	0.5356		mg/L		107	75 - 125
Lead	0.00473		0.500	0.5229		mg/L		104	75 - 125
Antimony	0.000664	J	0.250	0.2355		mg/L		94	75 - 125
Selenium	<0.00151		1.00	0.9908		mg/L		99	75 - 125
Thallium	0.00213		1.00	1.093		mg/L		109	75 - 125
Lithium	0.381		0.500	0.8527		mg/L		94	75 - 125

Lab Sample ID: 180-117074-1 MS
Matrix: Water
Analysis Batch: 347908

Client Sample ID: AP MW-5
Prep Type: Total Recoverable
Prep Batch: 346981

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	3.53		1.25	4.884		mg/L		108	75 - 125

Lab Sample ID: 180-117074-1 MSD
Matrix: Water
Analysis Batch: 347383

Client Sample ID: AP MW-5
Prep Type: Total Recoverable
Prep Batch: 346981

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.00950		1.00	1.029		mg/L		102	75 - 125	1	20
Barium	0.0556		1.00	1.104		mg/L		105	75 - 125	0	20
Beryllium	0.0520		0.500	0.5390		mg/L		97	75 - 125	2	20
Cadmium	0.00523		0.500	0.5048		mg/L		100	75 - 125	1	20
Calcium	354		25.0	374.2	4	mg/L		80	75 - 125	2	20
Chromium	0.00228		0.500	0.4991		mg/L		99	75 - 125	1	20
Cobalt	0.115		0.500	0.6247		mg/L		102	75 - 125	2	20
Molybdenum	<0.000610		0.500	0.5367		mg/L		107	75 - 125	0	20
Lead	0.00473		0.500	0.5214		mg/L		103	75 - 125	0	20
Antimony	0.000664	J	0.250	0.2365		mg/L		94	75 - 125	0	20
Selenium	<0.00151		1.00	0.9804		mg/L		98	75 - 125	1	20
Thallium	0.00213		1.00	1.083		mg/L		108	75 - 125	1	20
Lithium	0.381		0.500	0.8470		mg/L		93	75 - 125	1	20

Lab Sample ID: 180-117074-1 MSD
Matrix: Water
Analysis Batch: 347908

Client Sample ID: AP MW-5
Prep Type: Total Recoverable
Prep Batch: 346981

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	3.53		1.25	5.082		mg/L		124	75 - 125	4	20

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-346437/1-A
Matrix: Water
Analysis Batch: 347409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 346437

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/12/21 13:22	02/23/21 10:43	1

Lab Sample ID: LCS 180-346437/2-A
Matrix: Water
Analysis Batch: 347409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 346437

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.002502		mg/L		100	80 - 120

Lab Sample ID: MB 180-347430/1-A
Matrix: Water
Analysis Batch: 347536

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 347430

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000130		0.000200	0.000130	mg/L		02/23/21 14:39	02/24/21 11:27	1

Lab Sample ID: LCS 180-347430/2-A
Matrix: Water
Analysis Batch: 347536

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 347430

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.002255		mg/L		90	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-346611/2
Matrix: Water
Analysis Batch: 346611

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10.0		10.0	10.0	mg/L			02/15/21 15:28	1

Lab Sample ID: LCS 180-346611/1
Matrix: Water
Analysis Batch: 346611

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	457	404.0		mg/L		88	80 - 120

Lab Sample ID: 180-117078-1 DU
Matrix: Water
Analysis Batch: 346611

Client Sample ID: MNW-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	6150		6276		mg/L		2	10

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: MB 180-346881/2
Matrix: Water
Analysis Batch: 346881

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10.0		10.0	10.0	mg/L			02/17/21 14:56	1

Lab Sample ID: LCS 180-346881/1
Matrix: Water
Analysis Batch: 346881

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	457	452.0		mg/L		99	80 - 120

Lab Sample ID: 180-117062-2 DU
Matrix: Water
Analysis Batch: 346881

Client Sample ID: FB-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	<10.0		<10.0		mg/L		NC	10

Lab Sample ID: MB 180-346883/2
Matrix: Water
Analysis Batch: 346883

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10.0		10.0	10.0	mg/L			02/17/21 14:59	1

Lab Sample ID: LCS 180-346883/1
Matrix: Water
Analysis Batch: 346883

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	457	436.0		mg/L		95	80 - 120

Lab Sample ID: 180-117074-3 DU
Matrix: Water
Analysis Batch: 346883

Client Sample ID: EQ-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	<10.0		<10.0		mg/L		NC	10

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-498981/23-A
Matrix: Water
Analysis Batch: 501646

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 498981

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.009238	U	0.0534	0.0534	1.00	0.104	pCi/L	02/17/21 12:19	03/12/21 12:46	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.6*		*40 - 110*	*02/17/21 12:19*	*03/12/21 12:46*	*1*

Method: 903.0 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-498981/1-A
Matrix: Water
Analysis Batch: 501647

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 498981

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.42		1.09	1.00	0.102	pCi/L	92	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	85.6		40 - 110

Lab Sample ID: LCSD 160-498981/2-A
Matrix: Water
Analysis Batch: 501647

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 498981

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.3	11.19		1.17	1.00	0.0960	pCi/L	99	75 - 125	0.34	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	82.6		40 - 110

Lab Sample ID: MB 160-499133/23-A
Matrix: Water
Analysis Batch: 501946

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499133

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.02075	U	0.0544	0.0545	1.00	0.121	pCi/L	02/18/21 09:54	03/15/21 16:54	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		40 - 110	02/18/21 09:54	03/15/21 16:54	1

Lab Sample ID: LCS 160-499133/1-A
Matrix: Water
Analysis Batch: 501661

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499133

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	9.860		1.02	1.00	0.104	pCi/L	87	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	91.9		40 - 110

Lab Sample ID: LCSD 160-499133/2-A
Matrix: Water
Analysis Batch: 501661

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 499133

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.3	11.43		1.18	1.00	0.119	pCi/L	101	75 - 125	0.72	1

Method: 903.0 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCSD 160-499133/2-A
Matrix: Water
Analysis Batch: 501661

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 499133

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	86.5		40 - 110

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-498991/23-A
Matrix: Water
Analysis Batch: 500432

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 498991

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1733	U	0.236	0.237	1.00	0.394	pCi/L	02/17/21 14:48	03/02/21 09:08	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.6		40 - 110	02/17/21 14:48	03/02/21 09:08	1
Y Carrier	86.0		40 - 110	02/17/21 14:48	03/02/21 09:08	1

Lab Sample ID: LCS 160-498991/1-A
Matrix: Water
Analysis Batch: 500442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 498991

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			7.39	11.04	*	1.32	1.00	0.509	pCi/L	149	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	85.6		40 - 110
Y Carrier	72.5		40 - 110

Lab Sample ID: LCSD 160-498991/2-A
Matrix: Water
Analysis Batch: 500442

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 498991

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			7.39	9.565	*	1.18	1.00	0.506	pCi/L	129	75 - 125	0.59	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	82.6		40 - 110
Y Carrier	77.4		40 - 110

Lab Sample ID: MB 160-499136/23-A
Matrix: Water
Analysis Batch: 500812

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499136

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5449		0.238	0.243	1.00	0.334	pCi/L	02/18/21 10:43	03/04/21 08:34	1

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: MB 160-499136/23-A
Matrix: Water
Analysis Batch: 500812

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499136

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		40 - 110	02/18/21 10:43	03/04/21 08:34	1
Y Carrier	90.1		40 - 110	02/18/21 10:43	03/04/21 08:34	1

Lab Sample ID: LCS 160-499136/1-A
Matrix: Water
Analysis Batch: 500745

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499136

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			7.38	8.560		1.04	1.00	0.425	pCi/L	116	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	91.9		40 - 110
Y Carrier	77.8		40 - 110

Lab Sample ID: LCSD 160-499136/2-A
Matrix: Water
Analysis Batch: 500745

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 499136

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			7.38	8.106		1.00	1.00	0.449	pCi/L	110	75 - 125	0.22	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	86.5		40 - 110
Y Carrier	81.9		40 - 110

Lab Sample ID: MB 160-502088/16-A
Matrix: Water
Analysis Batch: 502687

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 502088

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1107	U	0.308	0.308	1.00	0.534	pCi/L	03/16/21 16:51	03/22/21 13:10	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	88.2		40 - 110	03/16/21 16:51	03/22/21 13:10	1
Y Carrier	84.5		40 - 110	03/16/21 16:51	03/22/21 13:10	1

Lab Sample ID: LCS 160-502088/1-A
Matrix: Water
Analysis Batch: 502708

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 502088

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.79	10.84		1.32	1.00	0.513	pCi/L	111	75 - 125		

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-502088/1-A
Matrix: Water
Analysis Batch: 502708

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 502088

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	90.0		40 - 110
Y Carrier	82.2		40 - 110

Lab Sample ID: LCSD 160-502088/2-A
Matrix: Water
Analysis Batch: 502708

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 502088

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			9.79	11.98		1.46	1.00	0.482	pCi/L	122	75 - 125	0.41	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	79.4		40 - 110
Y Carrier	82.6		40 - 110

HPLC/IC

Analysis Batch: 346554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117073-1	SFL MW-3	Total/NA	Water	EPA 9056A	
180-117073-1	SFL MW-3	Total/NA	Water	EPA 9056A	
180-117073-2	SFL MW-4	Total/NA	Water	EPA 9056A	
180-117073-2	SFL MW-4	Total/NA	Water	EPA 9056A	
180-117073-3	SFL MW-7	Total/NA	Water	EPA 9056A	
180-117073-3	SFL MW-7	Total/NA	Water	EPA 9056A	
180-117073-4	SFL MW-6	Total/NA	Water	EPA 9056A	
180-117073-4	SFL MW-6	Total/NA	Water	EPA 9056A	
180-117073-5	SSP MW-2	Total/NA	Water	EPA 9056A	
180-117073-5	SSP MW-2	Total/NA	Water	EPA 9056A	
180-117074-1	AP MW-5	Total/NA	Water	EPA 9056A	
180-117074-1	AP MW-5	Total/NA	Water	EPA 9056A	
180-117074-2	AP MW-4	Total/NA	Water	EPA 9056A	
180-117074-2	AP MW-4	Total/NA	Water	EPA 9056A	
180-117074-3	EQ-1	Total/NA	Water	EPA 9056A	
180-117078-1	MNW-15	Total/NA	Water	EPA 9056A	
180-117078-1	MNW-15	Total/NA	Water	EPA 9056A	
180-117078-2	DUP-1	Total/NA	Water	EPA 9056A	
180-117078-2	DUP-1	Total/NA	Water	EPA 9056A	
180-117078-3	SFL MW-2	Total/NA	Water	EPA 9056A	
180-117078-3	SFL MW-2	Total/NA	Water	EPA 9056A	
180-117078-4	SFL MW-5	Total/NA	Water	EPA 9056A	
180-117078-4	SFL MW-5	Total/NA	Water	EPA 9056A	
180-117078-5	FB-1	Total/NA	Water	EPA 9056A	
MB 180-346554/49	Method Blank	Total/NA	Water	EPA 9056A	
MB 180-346554/6	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-346554/48	Lab Control Sample	Total/NA	Water	EPA 9056A	
LCS 180-346554/5	Lab Control Sample	Total/NA	Water	EPA 9056A	

Analysis Batch: 346770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117061-1	MNW-18	Total/NA	Water	EPA 9056A	
180-117061-1	MNW-18	Total/NA	Water	EPA 9056A	
180-117061-2	SSP/AP MW-1	Total/NA	Water	EPA 9056A	
180-117061-2	SSP/AP MW-1	Total/NA	Water	EPA 9056A	
180-117062-1	SSP MW-3	Total/NA	Water	EPA 9056A	
180-117062-1	SSP MW-3	Total/NA	Water	EPA 9056A	
180-117062-2	FB-2	Total/NA	Water	EPA 9056A	
180-117062-3	SSP MW-4	Total/NA	Water	EPA 9056A	
180-117062-3	SSP MW-4	Total/NA	Water	EPA 9056A	
180-117062-4	AP MW-3	Total/NA	Water	EPA 9056A	
180-117062-4	AP MW-3	Total/NA	Water	EPA 9056A	
180-117062-5	AP MW-1D	Total/NA	Water	EPA 9056A	
180-117062-5	AP MW-1D	Total/NA	Water	EPA 9056A	
MB 180-346770/6	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-346770/5	Lab Control Sample	Total/NA	Water	EPA 9056A	

Metals

Prep Batch: 346437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117061-1	MNW-18	Total/NA	Water	7470A	
180-117061-2	SSP/AP MW-1	Total/NA	Water	7470A	
180-117062-1	SSP MW-3	Total/NA	Water	7470A	
180-117062-2	FB-2	Total/NA	Water	7470A	
180-117062-3	SSP MW-4	Total/NA	Water	7470A	
180-117062-4	AP MW-3	Total/NA	Water	7470A	
180-117062-5	AP MW-1D	Total/NA	Water	7470A	
180-117074-1	AP MW-5	Total/NA	Water	7470A	
180-117074-2	AP MW-4	Total/NA	Water	7470A	
180-117074-3	EQ-1	Total/NA	Water	7470A	
MB 180-346437/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-346437/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 346793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117073-1	SFL MW-3	Total Recoverable	Water	3005A	
180-117073-2	SFL MW-4	Total Recoverable	Water	3005A	
180-117073-3	SFL MW-7	Total Recoverable	Water	3005A	
180-117073-4	SFL MW-6	Total Recoverable	Water	3005A	
MB 180-346793/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-346793/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 346794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117073-5	SSP MW-2	Total Recoverable	Water	3005A	
MB 180-346794/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-346794/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 346914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117061-1	MNW-18	Total Recoverable	Water	3005A	
180-117061-2	SSP/AP MW-1	Total Recoverable	Water	3005A	
180-117062-1	SSP MW-3	Total Recoverable	Water	3005A	
180-117062-2	FB-2	Total Recoverable	Water	3005A	
180-117062-3	SSP MW-4	Total Recoverable	Water	3005A	
180-117062-4	AP MW-3	Total Recoverable	Water	3005A	
180-117062-5	AP MW-1D	Total Recoverable	Water	3005A	
MB 180-346914/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-346914/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 346981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117074-1	AP MW-5	Total Recoverable	Water	3005A	
180-117074-2	AP MW-4	Total Recoverable	Water	3005A	
180-117074-3	EQ-1	Total Recoverable	Water	3005A	
180-117078-1	MNW-15	Total Recoverable	Water	3005A	
180-117078-2	DUP-1	Total Recoverable	Water	3005A	
180-117078-3	SFL MW-2	Total Recoverable	Water	3005A	
180-117078-4	SFL MW-5	Total Recoverable	Water	3005A	
180-117078-5	FB-1	Total Recoverable	Water	3005A	
MB 180-346981/1-A	Method Blank	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 346981 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-346981/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-117074-1 MS	AP MW-5	Total Recoverable	Water	3005A	
180-117074-1 MSD	AP MW-5	Total Recoverable	Water	3005A	

Analysis Batch: 347047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117073-1	SFL MW-3	Total Recoverable	Water	EPA 6020B	346793
180-117073-2	SFL MW-4	Total Recoverable	Water	EPA 6020B	346793
180-117073-3	SFL MW-7	Total Recoverable	Water	EPA 6020B	346793
180-117073-4	SFL MW-6	Total Recoverable	Water	EPA 6020B	346793
180-117073-5	SSP MW-2	Total Recoverable	Water	EPA 6020B	346794
MB 180-346793/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	346793
MB 180-346794/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	346794
LCS 180-346793/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	346793
LCS 180-346794/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	346794

Analysis Batch: 347383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117061-1	MNW-18	Total Recoverable	Water	EPA 6020B	346914
180-117061-2	SSP/AP MW-1	Total Recoverable	Water	EPA 6020B	346914
180-117062-1	SSP MW-3	Total Recoverable	Water	EPA 6020B	346914
180-117062-2	FB-2	Total Recoverable	Water	EPA 6020B	346914
180-117062-3	SSP MW-4	Total Recoverable	Water	EPA 6020B	346914
180-117062-4	AP MW-3	Total Recoverable	Water	EPA 6020B	346914
180-117062-5	AP MW-1D	Total Recoverable	Water	EPA 6020B	346914
180-117074-1	AP MW-5	Total Recoverable	Water	EPA 6020B	346981
180-117074-2	AP MW-4	Total Recoverable	Water	EPA 6020B	346981
180-117074-3	EQ-1	Total Recoverable	Water	EPA 6020B	346981
180-117078-1	MNW-15	Total Recoverable	Water	EPA 6020B	346981
180-117078-2	DUP-1	Total Recoverable	Water	EPA 6020B	346981
180-117078-3	SFL MW-2	Total Recoverable	Water	EPA 6020B	346981
180-117078-4	SFL MW-5	Total Recoverable	Water	EPA 6020B	346981
180-117078-5	FB-1	Total Recoverable	Water	EPA 6020B	346981
MB 180-346914/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	346914
MB 180-346981/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	346981
LCS 180-346914/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	346914
LCS 180-346981/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	346981
180-117074-1 MS	AP MW-5	Total Recoverable	Water	EPA 6020B	346981
180-117074-1 MSD	AP MW-5	Total Recoverable	Water	EPA 6020B	346981

Analysis Batch: 347409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117061-1	MNW-18	Total/NA	Water	EPA 7470A	346437
180-117061-2	SSP/AP MW-1	Total/NA	Water	EPA 7470A	346437
180-117062-1	SSP MW-3	Total/NA	Water	EPA 7470A	346437
180-117062-2	FB-2	Total/NA	Water	EPA 7470A	346437
180-117062-3	SSP MW-4	Total/NA	Water	EPA 7470A	346437
180-117062-4	AP MW-3	Total/NA	Water	EPA 7470A	346437
180-117062-5	AP MW-1D	Total/NA	Water	EPA 7470A	346437
180-117074-1	AP MW-5	Total/NA	Water	EPA 7470A	346437
180-117074-2	AP MW-4	Total/NA	Water	EPA 7470A	346437

QC Association Summary

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

Metals (Continued)

Analysis Batch: 347409 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117074-3	EQ-1	Total/NA	Water	EPA 7470A	346437
MB 180-346437/1-A	Method Blank	Total/NA	Water	EPA 7470A	346437
LCS 180-346437/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	346437

Prep Batch: 347430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117073-1	SFL MW-3	Total/NA	Water	7470A	
180-117073-2	SFL MW-4	Total/NA	Water	7470A	
180-117073-3	SFL MW-7	Total/NA	Water	7470A	
180-117073-4	SFL MW-6	Total/NA	Water	7470A	
180-117073-5	SSP MW-2	Total/NA	Water	7470A	
180-117078-1	MNW-15	Total/NA	Water	7470A	
180-117078-2	DUP-1	Total/NA	Water	7470A	
180-117078-3	SFL MW-2	Total/NA	Water	7470A	
180-117078-4	SFL MW-5	Total/NA	Water	7470A	
180-117078-5	FB-1	Total/NA	Water	7470A	
MB 180-347430/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-347430/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 347536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117073-1	SFL MW-3	Total/NA	Water	EPA 7470A	347430
180-117073-2	SFL MW-4	Total/NA	Water	EPA 7470A	347430
180-117073-3	SFL MW-7	Total/NA	Water	EPA 7470A	347430
180-117073-4	SFL MW-6	Total/NA	Water	EPA 7470A	347430
180-117073-5	SSP MW-2	Total/NA	Water	EPA 7470A	347430
180-117078-1	MNW-15	Total/NA	Water	EPA 7470A	347430
180-117078-2	DUP-1	Total/NA	Water	EPA 7470A	347430
180-117078-3	SFL MW-2	Total/NA	Water	EPA 7470A	347430
180-117078-4	SFL MW-5	Total/NA	Water	EPA 7470A	347430
180-117078-5	FB-1	Total/NA	Water	EPA 7470A	347430
MB 180-347430/1-A	Method Blank	Total/NA	Water	EPA 7470A	347430
LCS 180-347430/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	347430

Analysis Batch: 347575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117061-1	MNW-18	Total Recoverable	Water	EPA 6020B	346914
180-117061-2	SSP/AP MW-1	Total Recoverable	Water	EPA 6020B	346914
180-117062-1	SSP MW-3	Total Recoverable	Water	EPA 6020B	346914
180-117062-2	FB-2	Total Recoverable	Water	EPA 6020B	346914
180-117062-3	SSP MW-4	Total Recoverable	Water	EPA 6020B	346914
180-117062-4	AP MW-3	Total Recoverable	Water	EPA 6020B	346914
180-117062-5	AP MW-1D	Total Recoverable	Water	EPA 6020B	346914
MB 180-346914/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	346914
MB 180-346981/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	346981
LCS 180-346914/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	346914
LCS 180-346981/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	346981

Analysis Batch: 347728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117078-2	DUP-1	Total Recoverable	Water	EPA 6020B	346981

Metals (Continued)

Analysis Batch: 347728 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117078-3	SFL MW-2	Total Recoverable	Water	EPA 6020B	346981
180-117078-4	SFL MW-5	Total Recoverable	Water	EPA 6020B	346981
180-117078-5	FB-1	Total Recoverable	Water	EPA 6020B	346981

Analysis Batch: 347908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117074-1	AP MW-5	Total Recoverable	Water	EPA 6020B	346981
180-117074-2	AP MW-4	Total Recoverable	Water	EPA 6020B	346981
180-117074-3	EQ-1	Total Recoverable	Water	EPA 6020B	346981
180-117078-1	MNW-15	Total Recoverable	Water	EPA 6020B	346981
MB 180-346981/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	346981
LCS 180-346981/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	346981
180-117074-1 MS	AP MW-5	Total Recoverable	Water	EPA 6020B	346981
180-117074-1 MSD	AP MW-5	Total Recoverable	Water	EPA 6020B	346981

General Chemistry

Analysis Batch: 346611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117061-1	MNW-18	Total/NA	Water	SM 2540C	
180-117061-2	SSP/AP MW-1	Total/NA	Water	SM 2540C	
180-117073-4	SFL MW-6	Total/NA	Water	SM 2540C	
180-117078-1	MNW-15	Total/NA	Water	SM 2540C	
180-117078-2	DUP-1	Total/NA	Water	SM 2540C	
180-117078-3	SFL MW-2	Total/NA	Water	SM 2540C	
180-117078-4	SFL MW-5	Total/NA	Water	SM 2540C	
180-117078-5	FB-1	Total/NA	Water	SM 2540C	
MB 180-346611/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-346611/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-117078-1 DU	MNW-15	Total/NA	Water	SM 2540C	

Analysis Batch: 346881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117062-1	SSP MW-3	Total/NA	Water	SM 2540C	
180-117062-2	FB-2	Total/NA	Water	SM 2540C	
180-117062-3	SSP MW-4	Total/NA	Water	SM 2540C	
180-117062-4	AP MW-3	Total/NA	Water	SM 2540C	
180-117062-5	AP MW-1D	Total/NA	Water	SM 2540C	
180-117073-1	SFL MW-3	Total/NA	Water	SM 2540C	
180-117073-2	SFL MW-4	Total/NA	Water	SM 2540C	
180-117073-3	SFL MW-7	Total/NA	Water	SM 2540C	
180-117073-5	SSP MW-2	Total/NA	Water	SM 2540C	
180-117074-1	AP MW-5	Total/NA	Water	SM 2540C	
180-117074-2	AP MW-4	Total/NA	Water	SM 2540C	
MB 180-346881/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-346881/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-117062-2 DU	FB-2	Total/NA	Water	SM 2540C	

Analysis Batch: 346883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117074-3	EQ-1	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 346883 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-346883/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-346883/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-117074-3 DU	EQ-1	Total/NA	Water	SM 2540C	

Rad

Prep Batch: 498981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117061-1	MNW-18	Total/NA	Water	PrecSep-21	
180-117061-2	SSP/AP MW-1	Total/NA	Water	PrecSep-21	
180-117062-1	SSP MW-3	Total/NA	Water	PrecSep-21	
180-117062-2	FB-2	Total/NA	Water	PrecSep-21	
180-117062-3	SSP MW-4	Total/NA	Water	PrecSep-21	
180-117062-4	AP MW-3	Total/NA	Water	PrecSep-21	
180-117062-5	AP MW-1D	Total/NA	Water	PrecSep-21	
180-117073-1	SFL MW-3	Total/NA	Water	PrecSep-21	
180-117073-2	SFL MW-4	Total/NA	Water	PrecSep-21	
180-117073-3	SFL MW-7	Total/NA	Water	PrecSep-21	
180-117073-4	SFL MW-6	Total/NA	Water	PrecSep-21	
180-117073-5	SSP MW-2	Total/NA	Water	PrecSep-21	
180-117074-1	AP MW-5	Total/NA	Water	PrecSep-21	
180-117074-2	AP MW-4	Total/NA	Water	PrecSep-21	
180-117074-3	EQ-1	Total/NA	Water	PrecSep-21	
180-117078-1	MNW-15	Total/NA	Water	PrecSep-21	
180-117078-2	DUP-1	Total/NA	Water	PrecSep-21	
MB 160-498981/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-498981/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-498981/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 498991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117062-2	FB-2	Total/NA	Water	PrecSep_0	
180-117074-3	EQ-1	Total/NA	Water	PrecSep_0	
180-117078-1	MNW-15	Total/NA	Water	PrecSep_0	
180-117078-2	DUP-1	Total/NA	Water	PrecSep_0	
MB 160-498991/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-498991/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-498991/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 499133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117078-3	SFL MW-2	Total/NA	Water	PrecSep-21	
180-117078-4	SFL MW-5	Total/NA	Water	PrecSep-21	
180-117078-5	FB-1	Total/NA	Water	PrecSep-21	
MB 160-499133/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-499133/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-499133/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 499136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117078-3	SFL MW-2	Total/NA	Water	PrecSep_0	

QC Association Summary

Client: HDR Inc
Job ID: 180-117061-1
Project/Site: Gibbons Creek Steam Electric Station

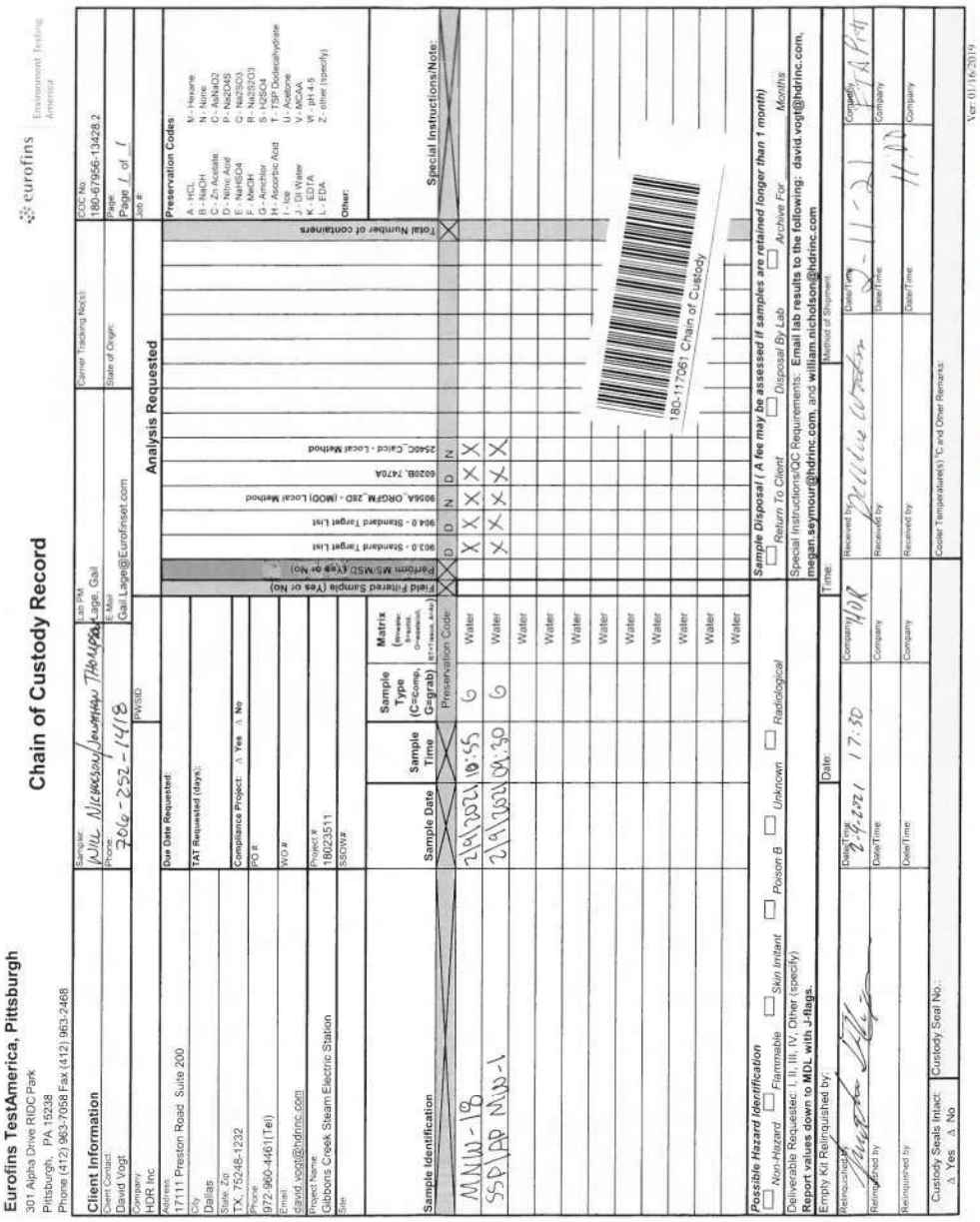
Rad (Continued)

Prep Batch: 499136 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117078-4	SFL MW-5	Total/NA	Water	PrecSep_0	
180-117078-5	FB-1	Total/NA	Water	PrecSep_0	
MB 160-499136/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-499136/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-499136/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 502088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-117061-1	MNW-18	Total/NA	Water	PrecSep_0	
180-117061-2	SSP/AP MW-1	Total/NA	Water	PrecSep_0	
180-117062-1	SSP MW-3	Total/NA	Water	PrecSep_0	
180-117062-3	SSP MW-4	Total/NA	Water	PrecSep_0	
180-117062-4	AP MW-3	Total/NA	Water	PrecSep_0	
180-117062-5	AP MW-1D	Total/NA	Water	PrecSep_0	
180-117073-1	SFL MW-3	Total/NA	Water	PrecSep_0	
180-117073-2	SFL MW-4	Total/NA	Water	PrecSep_0	
180-117073-3	SFL MW-7	Total/NA	Water	PrecSep_0	
180-117073-4	SFL MW-6	Total/NA	Water	PrecSep_0	
180-117073-5	SSP MW-2	Total/NA	Water	PrecSep_0	
180-117074-1	AP MW-5	Total/NA	Water	PrecSep_0	
180-117074-2	AP MW-4	Total/NA	Water	PrecSep_0	
MB 160-502088/16-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-502088/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-502088/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	



Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: WILL NICHOLSON / JONATHAN THOMPSON	Lab PM: Lage, Gail	Carrier Tracking No(s):	COC No: 180-67956-13428.2
Client Contact: David Vogt	Phone: 706-252-1418	E-Mail: Gail.Lage@Eurofinset.com	State of Origin:	Page: Page __ of __
Company: HDR Inc	PWSID:	Analysis Requested		Job #:
Address: 17111 Preston Road Suite 200	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Dallas	TAT Requested (days):			
State, Zip: TX, 75248-1232	Compliance Project: Δ Yes Δ No			
Phone: 972-960-4461(Tel)	PO #:			
Email: david.vogt@hdrinc.com	WO #:			
Project Name: Gibbons Creek Steam Electric Station	Project #: 18023511			
Site:	SSOW#:			Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0 - Standard Target List	904.0 - Standard Target List	9056A_ORGFM_28D - (MOD) Local Method	6020B_7470A	2540C_Calcd - Local Method	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	D	N		
SSP MW-3	2/10/2021	10:55	G	Water			X	X	X	X	X		
FB-2	2/10/2021	10:55	G	Water			X	X	X	X	X		
SSP MW-4	2/10/2021	12:00	G	Water			X	X	X	X	X		
AP MW-3	2/10/2021	13:05	G	Water			X	X	X	X	X		
AP MW-1D	2/10/2021	13:55	G	Water			X	X	X	X	X		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

180-117062 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)
Report values down to MDL with J-flags.

Special Instructions/QC Requirements: **Email lab results to the following: david.vogt@hdrinc.com, megan.seymour@hdrinc.com, and william.nicholson@hdrinc.com**

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	2-10-21 17:00	HDR	[signature]	2-11-21	ETAH
Relinquished by	Date/Time	Company	Received by	Date/Time 1100	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: WILL NICHOLSON / JONATHAN THOMPSON	Lab PM: Lage, Gail	Carrier Tracking No(s):	COC No: 180-67956-13428.2
Client Contact: David Vogt	Phone: 706-252-1418	E-Mail: Gail.Lage@Eurofinset.com	State of Origin:	Page: Page __ of __
Company: HDR Inc	PWSID:	Analysis Requested		Job #:
Address: 17111 Preston Road Suite 200	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Dallas	TAT Requested (days):			
State, Zip: TX, 75248-1232	Compliance Project: Δ Yes Δ No			
Phone: 972-960-4461(Tel)	PO #:			
Email: david.vogt@hdrinc.com	WO #:			
Project Name: Gibbons Creek Steam Electric Station	Project #: 18023511			
Site:	SSOW#:			Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0 - Standard Target List	904.0 - Standard Target List	9056A_ORGFM_28D - (MOD) Local Method	6020B_7470A	2540C_Calcd - Local Method	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	D	N		
SFL MW-3	2/10/2021	07:40	G	Water			X	X	X	X	X		
SFL MW-4	2/10/2021	06:30	G	Water			X	X	X	X	X		
SFL MW-7	2/10/2021	06:40	G	Water			X	X	X	X	X		
SFL MW-6	2/9/2021	12:45	G	Water			X	X	X	X	X		
SSP MW-2	2/10/2021	09:55	G	Water			X	X	X	X	X		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

180-117073 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)
Report values down to MDL with J-flags.

Special Instructions/QC Requirements: **Email lab results to the following: david.vogt@hdrinc.com, megan.seymour@hdrinc.com, and william.nicholson@hdrinc.com**

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	2-10-21 17:00	HDR	[signature]	2-11-21	ETAH
Relinquished by	Date/Time	Company	Received by	Date/Time 1100	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins Environment Testing America

JONATHAN THOMPSON

Client Information	Sampler: WILL NICHOLSON	Lab PM: Lage, Gail	Carrier Tracking No(s):	COC No: 180-67956-13428.2
Client Contact: David Vogt	Phone: 706-252-1418	E-Mail: Gail.Lage@Eurofinset.com	State of Origin:	Page: Page __ of __
Company: HDR Inc	PWSID:			Job #:
Address: 17111 Preston Road Suite 200	Due Date Requested:			
City: Dallas	TAT Requested (days):			
State, Zip: TX, 75248-1232	Compliance Project: Δ Yes Δ No			
Phone: 972-960-4461(Tel)	PO #:			
Email: david.vogt@hdrinc.com	WO #:			
Project Name: Gibbons Creek Steam Electric Station	Project #: 18023511			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0 - Standard Target List	904.0 - Standard Target List	9056A_ORGFM_28D - (MOD) Local Method	6020B, 7470A	2540C_Calcd - Local Method	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	D	N		
AP MW-5	2/10/2021	14:40	G	Water			X	X	X	X	X		
AP MW-4	2/10/2021	15:28	G	Water			X	X	X	X	X		
EQ-1	2/10/2021	16:00	G	Water			X	X	X	X	X		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

180-117074 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)
Report values down to MDL with J-flags.

Special Instructions/QC Requirements: **Email lab results to the following: david.vogt@hdrinc.com, megan.seymour@hdrinc.com, and william.nicholson@hdrinc.com**

Empty Kit Relinquished by: Date: Time: Method of Shipment:

Relinquished by:	Date/Time: 2-10-21 17:00	Company: HDR	Received by:	Date/Time: 2-11-21 11:00	Company: FEDEX
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

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3/25/2021

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: WILL NICHOLSON/JONATHAN THOMPSON	Lab PM: Lage, Gail	Carrier Tracking No(s):	COC No: 180-67956-13428.2
Client Contact: David Vogt	Phone: 706-252-1418	E-Mail: Gail.Lage@Eurofinset.com	State of Origin:	Page: Page __ of __
Company: HDR Inc	PWSID:			Job #:
Address: 17111 Preston Road Suite 200	Due Date Requested:			
City: Dallas	TAT Requested (days):			
State, Zip: TX, 75248-1232	Compliance Project: Δ Yes Δ No			
Phone: 972-960-4461(Tel)	PO #:			
Email: david.vogt@hdrinc.com	WO #:			
Project Name: Gibbons Creek Steam Electric Station	Project #: 18023511			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0 - Standard Target List	904.0 - Standard Target List	9056A_ORGFM_28D - (MOD) Local Method	6020B, 7470A	2540C_Calcd - Local Method	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	D	N		
MNW-1S	2/9/2021	15:55	G	Water			X	X	X	X	X		
DUP-1	2/9/2021	18:10	G	Water			X	X	X	X	X		
SFL MW-2	2/9/2021	14:45	G	Water			X	X	X	X	X		
SFL MW-5	2/9/2021	13:55	G	Water			X	X	X	X	X		
FB-1	2/9/2021	13:45	G	Water			X	X	X	X	X		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

180-117078 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)
Report values down to MDL with J-flags.

Special Instructions/QC Requirements: **Email lab results to the following: david.vogt@hdrinc.com, megan.seymour@hdrinc.com, and william.nicholson@hdrinc.com**

Empty Kit Relinquished by: Date: Time: Method of Shipment:

Relinquished by:	Date/Time: 2-9-2021 17:30	Company: HDR	Received by:	Date/Time: 2-11-21 11:00	Company: FEDEX
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

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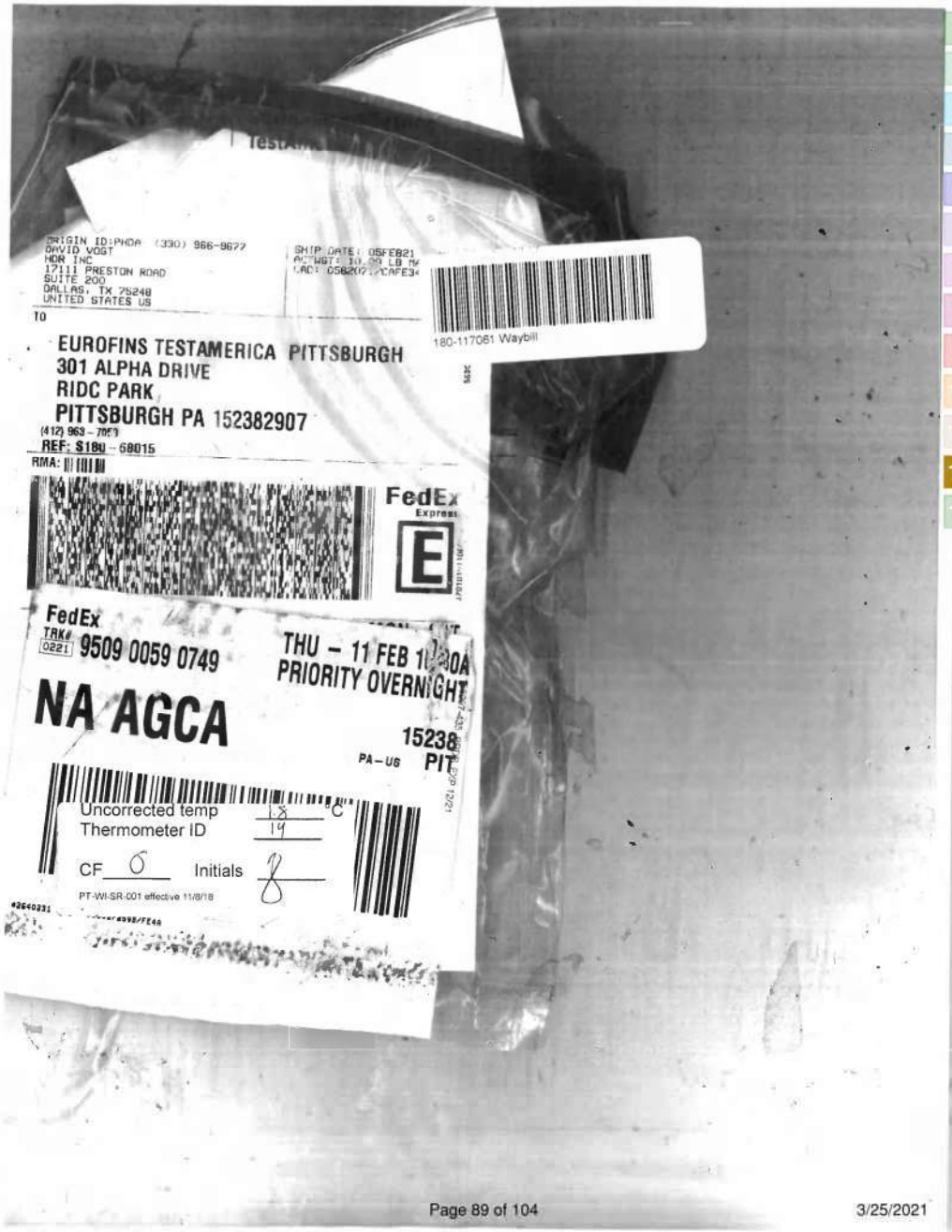
3/25/2021


ORIGIN ID:PHDA (330) 966-9672
DAVID VOST
HDR INC
17111 PRESTON ROAD
SUITE 200
DALLAS, TX 75248
UNITED STATES US
SHIP DATE: 05FEB21
180-117061 Waybill
TO
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 152382907
REF: S18U - 68015
RMA:
FedEx
Express
FedEx
TRK# 0221 9509 0059 0749
THU - 11 FEB 10:30A
PRIORITY OVERNIGHT
NA AGCA
15238
PA-US PIT
Uncorrected temp
Thermometer ID
CF 0
Initials
PT-WI-SR-001 effective 11/8/18


FedEx
TRK# 0221 9509 0059 0782
THU - 11 FEB 10:30A
PRIORITY OVERNIGHT
NA AGCA
15238
PIT
Uncorrected temp
Thermometer ID
CF 0
Initials
PT-WI-SR-001 effective 11/8/18
180-117062 Waybill


FedEx
180-117073 Waybill
9509 0059 0760
NA AGCA
PRIORITY OVERNIGHT
15238
PA-US
Uncorrected temp
Thermometer ID
CF
Initials
°C


THU - 11 FEB 10:3
PRIORITY OVERNIGHT
15238
PA-US
180-117074 Waybill

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lage, Gail	Carrier Tracking No(s):	COC No: 180-426209.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Gail.Lage@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 180-117061-1
Address: 13715 Rider Trail North,	Due Date Requested: 3/16/2021	Analysis Requested		Preservation Codes:
City: Earth City	TAT Requested (days):			A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify); Other:
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Gibbons Creek Steam Electric Station	Project #: 18023511			
Site:	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226/Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MNW-18 (180-117061-1)	2/9/21	10:55 Central		Water			X	X	X	2	
SSP/AP MW-1 (180-117061-2)	2/9/21	09:30 Central		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 2/12/21 17:00	Company: ETA 11:11	Received by: FedEx	Date/Time:	Company
Relinquished by: FedEx	Date/Time	Company	Received by:	Date/Time: 2/13/21 10:54	Company: ETASTL
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 180-117061-1

Login Number: 117061
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 180-117061-1

Login Number: 117061
List Number: 2
Creator: Boyd, Jacob C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 02/13/21 01:46 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 180-117061-1

Login Number: 117062
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 180-117061-1

Login Number: 117062
List Number: 2
Creator: Boyd, Jacob C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 02/13/21 01:56 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 180-117061-1

Login Number: 117073
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 180-117061-1

Login Number: 117073
List Number: 2
Creator: Boyd, Jacob C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 02/13/21 01:56 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 180-117061-1

Login Number: 117074
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 180-117061-1

Login Number: 117074
List Number: 2
Creator: Boyd, Jacob C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 02/13/21 12:12 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 180-117061-1

Login Number: 117078
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 180-117061-1

Login Number: 117078
List Number: 2
Creator: Boyd, Jacob C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 02/13/21 12:12 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	